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**Hampshire Structure Plan Review
Land North of the A303, Andover
Agricultural Land Classification
Reconnaissance Survey
ALC Map and Report
November 1994**

AGRICULTURAL LAND CLASSIFICATION REPORT.

HAMPSHIRE STRUCTURE PLAN REVIEW LAND NORTH OF THE A303, ANDOVER RECONNAISSANCE SURVEY

1. Summary

- 1.1 ADAS was commissioned by MAFF's Land Use Planning Unit to provide information on land quality for a number of 'areas of search' in connection with MAFF's input to the Hampshire Structure Plan Review.
- 1.2 Land to the north of the A303 at Andover comprises approximately 868 hectares of land bounded by Andover, Penton Mewsey, Enham Alamein and Smannel. An Agricultural Land Classification (ALC) survey was carried out during October 1994. The survey was completed at a reconnaissance level of detail, on a 'free' survey basis, as it was undertaken primarily to update the 1:63,360 scale provisional ALC maps for the area of search. Consequently the results are designed for strategic planning purposes only. For site specific proposals, further, more detailed surveys may be required. A total of 125 borings and five soil inspection pits were assessed in accordance with MAFF's revised guidelines and criteria for grading the quality of agricultural land (MAFF, 1988). These guidelines provide a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on its use for agriculture. Information was also drawn from four existent surveys (ADAS Refs: 1512/27/82, 1512/29/87, 1512/62/93, 1512/123/93) within the survey area.
- 1.3 The work was carried out by members of the Resource Planning Team in the Guildford Statutory Group of ADAS.
- 1.4 At the time of the survey the agricultural land was under permanent grass, ley grass, winter cereals, stubble, together with some areas of set aside. Urban areas include, village envelopes, individual dwellings, a farm park and a cemetery. Recreational land and woodland is shown as non-agricultural.
- 1.5 The distribution of grades and subgrades is shown on the attached ALC map and the areas are given in Table 1 overleaf. The map has been drawn at a scale of 1:50,000. It is accurate at this scale, but any enlargement would be misleading.
- 1.6 Appendix I gives a general description of the grades, subgrades and land use categories identified in the survey. The main classes are described in terms of the type of limitation that can occur, the typical cropping range and the expected level and consistency of yield.

Table 1: Distribution of Grades and Subgrades

Grade	Area (ha)	% of Site	% of Agricultural Land
2	130	15.0	16.5
3a	477	55.0	60.5
3b	182	21.0	23.0
Urban	42	4.8	<u>100% (789ha)</u>
Non-Agricultural	37	4.2	
Total area of Site	<u>868ha</u>	<u>100%</u>	

- 1.7 The agricultural land in this 'area of search' ranges from very good quality (Grade 2), to moderate quality (Subgrade 3b), including a substantial proportion of good quality (Subgrade 3a). Principal limitations include soil droughtiness and to a lesser extent soil workability and slope.

Soil droughtiness restricts land quality across the majority of the survey area. Where Grade 2 and Subgrade 3a is mapped, soils are derived from chalky or clayey drift over chalk at moderate depth. At some valley locations, soils are derived from deeper flinty deposits over chalk. The main agricultural limitation of such land is slight to moderate risk of drought. Where soils are shallow over chalk or where valley gravel deposits, containing very flinty subsoils occur, Subgrade 3b is appropriate due to an increased risk of drought. Solid chalk has the effect of restricting plant rooting depth, such that there is a reduction in the available water capacity of the soil, leading to a risk of drought stress to plants. Flints in the soil restrict available water in the soil profile by a reduction in the water holding matrix. In some areas, primarily on the eastern flanks of the dry valley features, slopes between 7° and 11° limit the land to Subgrade 3b, as cultivation is compromised in terms of the safe and efficient use of farm machinery.

2. Climate

- 2.1 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.
- 2.2 The main parameters used in the assessment of an overall climatic limitation are average annual rainfall, as a measure of overall wetness, and accumulated temperature, as a measure of the relative warmth of a locality.
- 2.3 An assessment of the prevailing climate was made by interpolation from a 5km gridpoint dataset (Met. Office, 1989) for 37 points in the survey area. A representative sample are given in Table 2 and these show that there is no overall climatic limitation affecting the site.
- 2.4 Due to the comparatively small differences in the climate in the survey area, the specific climatic variables chosen for the purposes of the survey (see table 3) was a composite of those obtained by interpolation from a total of 37 separate readings taken over the whole survey area. This composite was constructed by the use of

isopleth maps for each variable, such that the variables showing greatest areal coverage within the 'area of search' were those used throughout the survey.

Table 2: Climatic Interpolations

Grid Reference	SU342471	SU394480	SU364491
Altitude, (m, AOD)	70	90	105
Accumulated Temperature (°days, Jan.-June)	1463	1439	1422
Average Annual Rainfall (mm)	777	770	785
Field Capacity Days	170	170	173
Moisture deficit, wheat (mm)	102	104	99
Moisture deficit, potatoes (mm)	93	95	88
Overall Climatic Grade	1	1	1

Table 3: Climatic Variables used for Survey Work

Accumulated Temperature(°days, Jan.-June)	1439
Average Annual Rainfall (mm)	778
Field Capacity Days	170
Moisture deficit, wheat (mm)	100
Moisture deficit, potatoes (mm)	91
Overall Climatic Grade	1

- 2.5 No local climatic factors such as exposure or frost risk are believed to have a significant effect on the site. However, climatic and soil factors interact to influence soil wetness and droughtiness limitations.

3. Relief

- 3.1 The 'area of search' lies between approximately 70 and 105m AOD. The land mostly comprises a plateau falling gently from north to south. This is dissected by dry valley features, also falling gently from north to south.

4. Geology and Soils

- 4.1 The published geological information (BGS, 1975, 1:50,000 scale), shows the majority of the site to be underlain by Cretaceous Upper Chalk. In the dry valley features river and valley gravel is shown as a drift deposit. Towards the north of the area of search clay with flints is mapped, overlying the Chalk.
- 4.2 The published soils information (SSEW 1983 and 1984, 1:250,000 scale), shows the site to be underlain by soils from the Carstens, Andover 1 and Charity 2 Associations. These are respectively described as, 'well drained fine silty over clayey, clayey and fine silty soils, often very flinty,' (SSEW, 1983, Carstens Association). 'Shallow well drained calcareous silty soils over chalk on slopes and crests. Deep calcareous and non calcareous silty soils in valley bottoms. Striped soil patterns locally.' (SSEW, 1983, Andover 1 Association). 'Well drained flinty fine silty soils in valley bottoms. Calcareous fine silty soils over chalk or chalk

rubble on valley sides, sometimes shallow.' (SSEW, 1983, Charity 2 Association). Within the 'area of search', the soils encountered were broadly of the types described above. In the areas where soils are directly derived from Chalk, soil depth over this deposit was variable. In the areas coincident with clay with flints, soils were deep and clayey, containing few flints and occasionally passing to chalk at depth. In the areas mapped as river and valley gravel the soils were considered to be deep but were very flinty and often impenetrable to the soil auger and spade.

5. Agricultural Land Classification

- 5.1 Paragraph 1.5 provides the details of the area measurements for each grade and the distribution of each grade is shown on the attached ALC map.
- 5.2 The location of the soil observation points are shown on the attached sample point map.

Grade 2

- 5.3 Land of very good quality occurs over approximately 15% of the site in three mapping units. These broadly coincide with the areas shown as clay with flints on the published geology map (BGS, 1975). Soils in these areas were found to be well drained (Wetness Class I), but were limited by soil workability and/or soil droughtiness. A profile typical of these mapping units may comprise, a very slightly stony (3% v/v total flints), non calcareous medium or heavy silty clay loam topsoil, passing to a very slightly stony moderately structured non calcareous heavy silty clay loam, clay or silty clay upper subsoil. This was commonly found to overlie a slightly stony (c. 5% v/v total flints) permeable clay horizon, which, on occasion passed abruptly to chalk from approximately 80cm, or continued to depths in excess of 120cm. In the profiles where chalk occurred at depth such as the soil pit, 3p (see Appendix III), the principal limitation was soil droughtiness. Chalk has the effect of restricting both rooting depth and available water capacity, such that there is an overall reduction in profile available water, leading to a slight risk of drought stress in this area. In the observations where chalk was not encountered, the moisture retentive nature of the soils is sufficient to provide adequate reserves of soil water for plant growth. However, due to the relatively wet local climate, and the comparatively heavy topsoil textures encountered in this soil group (principally heavy silty clay loams), this area is very slightly restricted by soil workability, as flexibility in the timing of cultivation or stocking is reduced, if structural damage to the soil is to be avoided.

Subgrade 3a

- 5.4 Land of good quality occurs over the majority of the site (55%). The principal limitation is soil droughtiness. Soils within this classification are well drained (Wetness Class I) and fall into two main types. The most common are deeper soils occurring over chalk or chalky drift and comprise a slightly stony (up to 15% v/v total flints with up to 10% >2cm) silt loam, silty clay loam or occasionally clay loam topsoil which is commonly calcareous. This passes to a slightly stony (up to 15% v/v total flints) and/or moderately chalky (up to c. 20% chalk fragments)

calcareous silt loam, silty clay loam, clay loam, occasionally clay upper subsoil, which commonly overlies either very slightly flinty (approx. 2% flints) Chalk or impenetrable chalky drift between 33 and 70cm. Chalk and chalky drift have the effect of restricting plant rooting and consequently the available water capacity of the profile, such that from the pit observation 1p (see Appendix III), roots were found to extend approximately 30cm into the substrate. The restriction in profile available water is such that in this area there is a moderate risk of drought stress affecting plant growth and yield.

- 5.5 The second situation where Subgrade 3a is mapped is commonly associated with the dry valley features and on the lower land towards the west of the site. The soils are well drained (Wetness Class I) and are derived from flinty drift or valley gravels overlying Chalk. Typically the soil profiles comprise a slightly stony (up to 15% v/v total flints, with up to 12% >2cm) non calcareous, silt loam, or medium silty clay loam topsoil. This passes to a very slightly stony to very stony (5 to 40% v/v total flints) silt loam, silty clay loam, or clay subsoil. Soil pit 4p (see Appendix III) is typical of this soil type. Flints in the soil profile restrict plant available water, by reducing the volume of the moisture holding soil matrix, and in themselves interfere with crop germination and growth. The volume of larger (>2cm) flints in the topsoil also increases cultivation costs through enhanced implement and tyre wear. Given the local climatic parameters Subgrade 3a is appropriate as there is a moderate risk of drought stress affecting plant growth and yield.

Subgrade 3b

- 5.6 Land of moderate quality occurs over approximately 21% of the site in a total of six mapping units. Principal limitations to land quality include soil droughtiness and gradient. Soils within the Subgrade 3b classification fall into two main groups. The first and most extensive is mostly located towards the east of the site on slopes and crests. The soils are well drained (Wetness Class I), shallow and often chalky and/or stony soils over solid Chalk. Typically they comprise a slightly to moderately stony (up to 18% v/v total flints, 10% >2cm) calcareous medium silty clay loam topsoil, passing to a shallow moderately stony or very chalky (up to 20% v/v total flints or up to 50% chalk fragments) calcareous medium silty clay loam upper subsoil, which overlies pure chalk between 23 and 30cm depth. Chalk at shallow depths has the effect of restricting plant rooting depth. The pit observation 2p (see Appendix III) is typical of this soil type. Chalk has the effect of reducing profile available water and under the prevailing climatic conditions Subgrade 3b is appropriate, due to an increased risk of drought stress affecting plant growth and yield consistency.
- 5.7 The second and less extensive type of soil within Subgrade 3b commonly occurs at the base of the dry valley features where valley gravels and flinty drift overlie chalk. Typical profiles are well drained (Wetness Class I) and comprise a slightly to moderately stony (up to 20% v/v total flints, with up to 10% >2cm) non calcareous, medium silty clay loam, occasionally medium clay loam topsoil. This passes to moderately or very stony (up to 50% v/v total flints) non calcareous silty clay loam or clay subsoil horizons before becoming impenetrable to the soil auger

and spade between 30 and 70cm. The soils described above (para. 5.5, Subgrade 3a) are essentially similar in nature, but have a lower flint content. The flints in the profile significantly reduce the water holding capacity of the soil such that, within the local climatic parameters there is a risk of drought stress affecting plant growth and yield consistency.

- 5.8 In some areas of the site, primarily on the west facing slopes of the dry valley features towards the west of the site, slopes were a significant factor in land classification. Gradients in these areas were measured, with an optical reading clinometer at between 7° and 11°. Slopes in this gradient range are sufficient to compromise the safe and efficient operation of farm machinery, particularly for cultivation and harvesting, to the extent that Subgrade 3b is appropriate.

ADAS Reference: 1512/248/94
MAFF Reference: EL15/518

Resource Planning Team
Guildford Statutory Group
ADAS Reading

SOURCES OF REFERENCE

ADAS (1982), Andover Area Local Plan, Agricultural Land Classification Report. Reference 1512/027/82

ADAS (1987), Andover Area District Plan, Agricultural Land Classification Report. Reference 1512/029/87

ADAS (1993), Test Valley Local Plan, Site 194, Enham Alamein, Agricultural Land Classification Report. Reference 1512/062/93

ADAS (1993), Test Valley Local Plan, Site 89, North of Charlton, Agricultural Land Classification Report. Reference 1512/123/93

British Geological Survey (1975), Sheet 238, Andover, 1:50,000. Drift Edition.

MAFF (1988), Agricultural Land Classification of England and Wales : Revised guidelines and criteria for grading the quality of agricultural land.

Meteorological Office (1989), Climatic datasets for Agricultural Land Classification.

Soil Survey of England and Wales (1983), Sheet No. 6, Soils of South-East England, 1:250,000, and Accompanying Legend.

Soil Survey of England and Wales (1984), Bulletin No.15, Soils and their use in South-East England.

APPENDIX I

DESCRIPTION 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.

Urban

Built-up or 'hard' uses with relatively little potential for a return to agriculture including: housing, industry, commerce, education, transport, religious buildings, cemeteries. Also, hard-surfaced sports facilities, permanent caravan sites and vacant land; all types of derelict land, including mineral workings which are only likely to be reclaimed using derelict land grants.

Non-agricultural

'Soft' uses where most of the land could be returned relatively easily to agriculture, including: private parkland, public open spaces, sports fields, allotments and soft-surfaced areas on airports. Also active mineral workings and refuse tips where restoration conditions to 'soft' after-uses may apply.

Woodland

Includes commercial and non-commercial woodland. A distinction may be made as necessary between farm and non-farm woodland.

Agricultural Buildings

Includes the normal range of agricultural buildings as well as other relatively permanent structures such as glasshouses. Temporary structures (e.g. polythene tunnels erected for lambing) may be ignored.

Open Water

Includes lakes, ponds and rivers as map scale permits.

Land Not Surveyed

Agricultural land which has not been surveyed.

Where the land use includes more than one of the above, e.g. buildings in large grounds, and where map scale permits, the cover types may be shown separately. Otherwise, the most extensive cover type will be shown.

APPENDIX II

DEFINITION OF SOIL WETNESS CLASS

Wetness Class I

The soil profile is not wet within 70 cm depth for more than 30 days in most years.

Wetness Class 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 180 days, but only wet within 40 cm depth for 31-90 days in most years.

Wetness Class 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.

Wetness Class 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.

Wetness Class V

The soil profile is wet within 40 cm depth for 211-335 days in most years.

Wetness Class VI

The soil profile is wet within 40 cm depth for more than 335 days in most years.

APPENDIX III
SOIL PIT AND SOIL BORING DESCRIPTIONS

Contents :

- Sample Point Map**
- Soil Abbreviations - explanatory note**
- Database Printout - soil pit information**
- Database Printout - boring level information**
- Database Printout - horizon level information**

SOIL PROFILE DESCRIPTIONS : EXPLANATORY NOTE

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

Boring Header Information

1. **GRID REF** : national 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 measured by a hand-held optical clinometer.
4. **GLEYSPL** : Depth in cm to gleying or slowly permeable layers.
5. **AP (WHEAT/POTS)** : Crop-adjusted available water capacity.
6. **MB (WHEAT/POTS)** : Moisture Balance.
7. **DRT** : Best grade according to soil droughtiness.
8. If any of the following factors are considered significant, an entry of 'Y' will be entered in the relevant column.

MREL : Microrelief limitation	FLOOD : Flood risk	EROSN : Soil erosion risk
EXP : Exposure limitation	FROST : Frost	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	ST : Topsoil Stones
CH : Chemical	WE : Wetness	WK : Workability	
DR : Drought	ER : Erosion Risk	WD : Soil Wetness/Droughtiness	

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 **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 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
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

6. **STONE LITH** : 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 **GH** : gravel with non-porous (hard) stones
SI : soft weathered igneous/metamorphic rock
Stone contents (>2cm, >6cm and total) are given in percentages (by volume).

7. **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

8. **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

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

10. **POR** : Soil porosity. If a soil horizon has less than 0.5% biopores >0.5 mm, a 'Y' will appear in this column.

11. **IMP** : If the profile is impenetrable a 'Y' will appear in this column at the appropriate horizon.

12. **SPL** : Slowly permeable layer. If the soil horizon is slowly permeable a 'Y' will appear in this column.

13. **CALC** : If the soil horizon is calcareous, a 'Y' will appear in this column.

14. 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	GRDNT	--WETNESS--		-WHEAT-		-POTS-		M.REL		EROSN	FROST	CHEM	ALC	COMMENTS
				GLEYS	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	
1	SU39684761	LEY N	03		1	1	94	-6	99	8	3A				DR 3A	IMP55 ROOTS65
1P	SU36804800	CER W	01		1	2	102	2	101	10	3A				DR 3A	PIT75 ROOTS80
2	SU39554762	ARA SW	01		1	1	108	8	112	21	2				TS 3A	IMP55 ROOTS65
2P	SU38724792	ARA S	02		1	1	76	-24	79	-12	3B				DR 3B	PIT65 ROOTS60
3	SU39184758	ARA S	03		1	1	101	1	107	16	3A				DR 3A	IMP60 ROOTS65
3P	SU35064800	PLO SE	01		1	2	122	22	116	25	2				WD 2	PIT97 ROOTS100
4	SU39034795	CER			1	1	84	-16	89	-2	3A				DR 3A	IMP50 ROOTS65
4P	SU34084727	CER S	02		1	1	81	-19	90	-1	3A				DR 3A	PIT 70
5	SU39164812	CER S	01		1	1	74	-26	74	-17	3B				TS 3A	IMP 40 SEE 4P
5P	SU37804820	CER W	01		1	1	74	-26	76	-15	3B				DR 3B	IFLINTS PIT 55
6	SU38924816	MZE E	03		1	1	101	1	106	15	3A				DR 3A	IMP70 ROOTS75
7	SU38304816	CER NE	01		1	1	78	-22	81	-10	3B				DR 3B	IMP60 ROOTS60
8	SU38214835	CER N	03		1	1	81	-19	86	-5	3A				TS 3A	IMP65 ROOTS65
9	SU38504854	LEY N	02		1	1	89	-11	94	3	3A				DR 3A	IMP65 ROOTS65
10	SU38254854	CER W	01		1	1	102	2	108	17	3A				DR 3A	IMP75 ROOTS75
11	SU38074864	STU N	01		1	1	99	-1	110	19	3A				TS 3A	IMP75 ROOTS75
12	SU37954876	PGR N	04		1	1	56	-44	56	-35	3B				DR 3A	IMP 33 SEE 4P
13	SU37954851	STU NW	02		1	1	89	-11	94	3	3A				DR 3A	IMP65 ROOTS65
14	SU38024840	CER W	02		1	1	130	30	118	27	2				DR 2	IMP FLINTS 100
15	SU38034812	CER W	02		1	1	90	-10	96	5	3A				DR 3A	IMP65 ROOTS65
16	SU37014782	CER S	02		1	1	110	10	112	21	2				DR 2	IMP80 ROOTS85
17	SU36934800	CER S	02		1	2	98	-2	108	17	3A				DR 3A	IMP70 ROOTS70
18	SU36804800	CER W	01		1	2	90	-10	97	6	3A				DR 3A	IMP60 ROOTS60
19	SU38904750	LEY W	02		1	1	89	-11	90	-1	3A				DR 3A	IMP55 ROOTS55
20	SU35904783	STU SE	01	070 070	2	2	84	-16	90	-1	3A				DR 3A	IMP FLINTS 80
21	SU35604770	CER			1	2	101	1	109	18	3A				DR 3A	IMP70 ROOTS80
22	SU35824815	STB SE	01		1	2	104	4	110	19	3A				DR 3A	IMP70 ROOTS80
23	SU35404772	CER W	02		1	2	87	-13	91	0	3A				DR 3A	IMP65 ROOTS65
24	SU35364783	CER W	06		1	1	77	-23	80	-11	3B				DR 3B	IMP60 ROOTS60
25	SU35654800	CER W	06		1	1	77	-23	80	-11	3B				DR 3B	IMP60 ROOTS60
26	SU35454890	CER W	02	033	1	1	113	13	114	23	2				DR 2	IMP90 ROOTS90
27	SU35644874	CER S	01		1	1	79	-21	79	-12	3B				DR 3A	IMP 50 SEE 4P
28	SU35784872	CER W	06		1	1	73	-27	76	-15	3B				DR 3B	IMP60 ROOTS60
29	SU35324832	CER E	01		1	1	102	2	106	15	3A				DR 3A	BDR 2 I80 R80
30	SU35504830	CER S	03		1	1	78	-22	85	-6	3B				DR 3A	IMP 60 SEE 4P
31	SU35374860	CER S	01		1	1	111	11	115	24	2				DR 2	IMP FLINTS 85
32	SU35144869	CER S	01		1	1	113	13	115	24	2				DR 2	IMP70 ROOTS90
33	SU35124850	CER			1	1	123	23	116	25	2				DR 2	IMP FLINTS 100
34	SU34154820	CER E	01		1	1	75	-25	75	-16	3B				DR 3A	IMP 45 SEE 4P
35	SU34224817	CER NW	05		1	1	80	-20	83	-8	3A				DR 3B	BDR 3A I60 R60
36	SU34104769	CER			1	2	68	-32	76	-15	3B				DR 3B	IMP FLINTS 70
37	SU34034778	CER NW	10		1	1	72	-28	75	-16	3B				GR 3B	SLOPE I60 R60

SAMPLE NO.	GRID REF	ASPECT USE	GRDNT	--WETNESS--		-WHEAT-		-POTS-		M.REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC COMMENTS	
				GLEY	SPL	CLASS	GRADE	AP	MB	AP	MB					DRT
38	SU33904780	CER SE	02		1	1	72	-28	72	-19	3B			DR	3A	IMP 45 SEE 4P
39	SU33604757	PGR E	03		1	1	79	-21	79	-12	3B			DR	3A	IMP 40 SEE 4P
40	SU33624722	PGR S	01		1	1	98	-2	98	7	3A			DR	3A	IMP 50 SEE 4P
41	SU39874775	LEY NW	02		1	1	79	-21	79	-12	3B			DR	3A	IMP50 ROOTS50
42	SU39734788	LEY NW	04		1	1	103	3	111	20	3A			DR	3A	IMP60 ROOTS70
43	SU39684792	LEY W	01		1	1	47	-53	47	-44	4			DR	3B	IMP 30 SEE 5P
44	SU39604800	LEY SE	03		1	1	78	-22	81	-10	3B			DR	3B	IMP40 BORDER3A
45	SU39554810	CER W	01		1	1	86	-14	89	-2	3A			DR	3A	IMP60 ROOTS60
46	SU39334845	LEY SW	01		1	1	87	-13	91	0	3A			DR	3A	IMP50 ROOTS60
47	SU39324803	CER SE	01		1	1	89	-11	90	5	3A			DR	3A	IMP65 ROOTS65
48	SU38994847	CER SE	01		1	1	114	14	113	22	2			DR	2	IMP92 ROOTS92
49	SU39604858	CER			1	1	91	-9	95	4	3A			DR	3A	IMP55 ROOTS65
50	SU39064868	CER S	01		1	1	80	-20	84	-7	3B			DR	3B	IMP40 ROOTS65
51	SU39224860	CER NW	02		1	1	93	-7	97	6	3A			DR	3A	IMP50 ROOTS65
52	SU38454875	LEY SW	01		1	1	77	-23	81	-10	3B			DR	3B	IMP40 ROOTS65
53	SU38234890	CER NW	02		1	1	96	-4	105	14	3A			DR	3A	IMP70 ROOTS70
54	SU38124895	CER NW	04		1	1	82	-18	86	-5	3A			DR	3A	IMP65 ROOTS60
55	SU37944795	CER W	02		1	1	90	-10	94	3	3A			DR	3A	IMP50 ROOTS65
56	SU37774780	CER			1	1	84	-16	84	-7	3A			DR	3A	IMP FLINTS 50
57	SU37804820	CER W	01		1	1	74	-26	76	-15	3B			DR	3B	IMP FLINTS 55
58	SU37924833	CER W	03		1	1	78	-22	81	-10	3B			DR	3B	IMP40 ROOTS60
59	SU37954828	CER W	02		1	1	113	13	119	28	2			DR	2	IMP FLINTS 80
60	SU36704847	OSR W	01		1	1	50	-50	50	-41	3B			DR	3B	IMP 30 SEE 5P
61	SU37004880	STB W	01		1	1	81	-19	84	-7	3A			DR	3A	IMP70 ROOTS60
62	SU37404886	STB NW	01		1	2	105	5	110	19	3A			DR	3A	IMP65 ROOTS80
63	SU37554890	STB E	01		1	2	112	12	112	21	2			DR	2	IMP FLINTS 90
64	SU37634870	LEY E	03		1	1	85	-15	86	-5	3A			DR	3A	IMP FLINTS 52
65	SU37834880	SAS E	02		1	1	54	-46	54	-37	3B			DR	3B	IMP 32 SEE 5P
66	SU37594865	SAS E	01		1	1	66	-34	66	-25	3B			DR	3A	IMP 40 SEE 4P
67	SU37154833	CER S	01		1	2	109	9	116	25	2			WD	2	IMP FLINTS 80
68	SU36804835	OSR W	03		1	1	85	-15	90	-1	3A			DR	3A	IMP45 ROOTS65
69	SU37624780	LEY S	03		1	1	93	-7	100	9	3A			DR	3A	IMP60 ROOTS70
70	SU37304742	PLO			1	1	56	-44	56	-35	3B			DR	3B	IMP 35 SEE 5P
71	SU37304770	PGR S	02		1	1	93	-7	97	6	3A			DR	3A	IMP55 ROOTS65
72	SU37284785	STB			1	1	95	-5	103	12	3A			DR	3A	IMP60 ROOTS70
73	SU37624801	SAS E	03		1	1	51	-49	51	-40	3B			DR	3B	IMP 30 SEE 5P
74	SU37774807	SAS			1	1	52	-48	52	-39	3B			DR	3B	IMP 30 SEE 5P
75	SU36604835	STB E	01		1	1	89	-11	96	5	3A			DR	3A	IMP FLINTS 60
76	SU36594860	STB E	04		1	1	61	-39	61	-30	3B			DR	3B	IMP 40 SEE 5P
77	SU36524880	STB E	02		1	1	86	-14	93	2	3A			DR	3A	IMP62 ROOTS62
78	SU36584910	ARA E	02		1	2	131	31	109	18	1			WE	2	CH TRACE @ 120
79	SU36354915	PGR			1	2	92	-8	98	7	3A			DR	3A	IMP58 ROOTS70

SAMPLE NO.	GRID REF	ASPECT USE	GRDNT	--WETNESS--				-WHEAT-		-POTS-		M.REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
				GLEYS	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD					
90	SU35854890	PGR S	01		1	2	89	-11	96	5	3A				DR	3A	IMP60 ROOTS70	
91	SU36004868	PGR			1	2	103	3	110	19	3A				DR	3A	IMP70 ROOTS80	
92	SU36334853	PGR S	01		1	1	79	-21	79	-12	3B				DR	3A	IMP FLINTS 50	
93	SU36034828	PLO SE	02		1	1	106	6	112	21	2				DR	2	IMP FLINTS 80	
94	SU36034795	STB E	03		1	2	46	-54	46	-45	4				DR	3B	IMP 30 SEE 5P	
95	SU36284828	LEY S	01		1		77	-23	77	-14	3B				DR	3A	IMP 50 SEE 4P	
96	SU36384818	PGR E	03		1	1	84	-16	93	2	3A				DR	3A	IMP 65 SEE 4P	
97	SU36504820	PGR			1	1	97	-3	105	14	3A				DR	3A	IMP FLINTS 75	
98	SU35084800	PLO SE	02		1	2	120	20	113	22	2				WD	2	IMP80 ROOTS100	
99	SU35124790	PLO SE	03		1	2	118	18	111	20	2				WD	2	IMP100ROOTS100	
100	SU35184771	PLO SE	03		1	2	100	0	103	12	3A				DR	3A	IMP80 ROOTS80	
101	SU35224767	PLO S	01		1	1	102	2	105	14	3A				DR	2	IMP FLINTS 80	
102	SU35284752	PLO NW	05		1	1	89	-11	93	2	3A				DR	3A	IMP45 ROOTS65	
103	SU35214775	PLO NW	02		1	1	110	10	109	18	2				DR	2	IMP85 ROOTS85	
104	SU35234795	PLO			1	1	60	-40	60	-31	3B				DR	3A	IMP FLINTS 40	
105	SU35224807	PLO NW	02		1	2	81	-19	86	-5	3A				DR	3A	IMP FLINTS 60	
106	SU34884795	BAR			1	2	133	33	112	21	1				WK	2	NO CH IN 120	
107	SU34934780	BAR SE	02		1	2	101	1	108	17	3A				DR	3A	IMP60 ROOTS75	
108	SU35004760	BAR S	01		1	2	114	14	114	23	2				WD	2	IMP90 ROOTS90	
109	SU34824760	BAR S	01		1	2	110	10	111	20	2				WD	2	IMP85 ROOTS85	
110	SU34714755	BAR			1	2	105	5	107	16	2				DR	2	IMP85 ROOTS85	
111	SU34584736	BAR SW	01		1	2	86	-14	92	1	3A				DR	3A	IMP FLINTS 60	
112	SU34384735	BAR SW	01		1	1	111	11	111	20	2				DR	2	IMP FLINTS 90	
113	SU34384750	PGR			1	1	102	2	110	19	3A				DR	2	IMP FLINTS 75	
114	SU34504768	BAR S	01		1	2	111	11	109	18	2				WD	2	IMP90 ROOTS90	
115	SU34524785	BAR SE	02		1	2	109	9	103	12	2				WD	2	IMP90 ROOTS90	
116	SU34594805	CER			1	2	109	9	117	26	2				WD	2	IMP80 ROOTS80	
117	SU34824848	CER			1	2	135	35	112	21	1				WK	2	NO CH IN 120	
118	SU34624841	CER W	01		1	2	76	-24	78	-13	3B				DR	3B	IMP45 ROOTS60	
119	SU34404830	CER W	02		1	1	79	-21	82	-9	3B				DR	3B	IMP50 ROOTS60	
120	SU34304807	CER W	02		1	1	85	-15	88	-3	3A				DR	3A	IMP60 ROOTS60	
121	SU34404788	CER W	01		1	1	81	-19	86	-5	3A				DR	3A	IMP55 ROOTS65	
122	SU34424782	PGR			1	2	112	12	116	25	2				WD	2	IMP FLINT 85	
123	SU34184770	PLO SE	02		1	2	71	-29	74	-17	3B				DR	3B	IMP FLINTS 55	
124	SU34284769	PLO SE	02		1	1	102	2	107	16	3A				DR	3A	IMP75 ROOTS75	
125	SU34384760	PGR SE	01		1	1	114	14	114	23	2				DR	2	IMP FLINTS 90	
126	SU34204750	PGR S	02		1	1	87	-13	93	2	3A				DR	3A	IMP FLINTS 80	
127	SU33604762	PGR SE	04		1	1	126	26	109	18	2				DR	2	IMP110ROOTS110	
128	SU33654750	PGR SE			1	1	54	-46	54	-37	3B				DR	3B	IMP 40 SEE 5P	
129	SU33984748	CER W	01		1	1	55	-45	55	-36	3B				DR	3B	IMP FLINTS 40	
130	SU33984720	CER S	02		1	1	91	-9	99	8	3A				DR	3A	IMP 65 SEE 4P	
131	SU34134711	CER			1	1	74	-26	76	-15	3B				DR	3A	IMP 55 SEE 4P	

SAMPLE NO.	GRID REF	ASPECT		GRDNT	SPL	--WETNESS--		-WHEAT-		-POTS-		M.REL		EROSN	FROST		CHEM	ALC	COMMENTS	
		USE				CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD		EXP	DIST				LIMIT
122	SU34084732	CER	S	02		1	1	83	-17	91	0	3A								
123	SU34224740	LEY	S	03		1	1	109	9	104	13	2						DR	3A	IMP 65 SEE 4P
124	SU34034742	LEY	S	03		1	1	87	-13	93	2	3A						DR	2	IMP FLINTS 90
125	SU34014708	CER	S	02		1	1	59	-41	59	-32	3B						DR	3A	IMP 60 SEE 4P

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED	----STONES-----			STRUCT/	SUBS		SPL	CALC
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH	TOT	CONSIST		
1	0-23	z1	10YR43 00					10	3	HR	12				Y
	23-40	z1	10YR54 00					0	0	CH	50		M		Y
	40-65	ch	22XX22 00					0	0	HR	2		P		Y IMP CHALK 55
1P	0-27	hzc1	10YR43 00					1	0	HR	5				
	27-37	c	75YR46 00					0	0	HR	5	MDCSAB	FR	M	Y
	37-52	c	75YR46 81					0	0	CH	50		M		Y
	52-80	ch	10YR81 00					0	0	HR	2		P		Y PIT 75
2	0-25	z1	10YR43 00					12	5	HR	14				Y
	25-50	z1	10YR44 00					0	0	HR	14		M		Y
	50-65	ch	22XX22 00					0	0	HR	2		P		Y IMP CHALK 55
2P	0-20	mzc1	10YR43 00					5	2	HR	6				Y
	20-26	mzc1	10YR43 44					0	0	HR	8		M		Y
	26-60	ch	10YR81 00					0	0	HR	2		P		Y PIT 65
3	0-25	z1	10YR43 00					7	1	HR	10				Y
	25-45	mzc1	75YR54 00					0	0	HR	10		M		Y
	45-55	mzc1	75YR54 00					0	0	CH	35		M		Y
	55-65	ch	22XX22 00					0	0	HR	2		P		Y IMP CHALK 60
3P	0-25	hzc1	10YR43 00					0	1	HR	3				
	25-53	c	10YR58 00					0	0	HR	3	MDCSAB	FR	M	Y
	53-88	c	75YR56 00	00MN00	00	F		0	0	HR	5	MDCSAB	FM	M	Y
	88-100	ch	10YR81 00					0	0	HR	2		P		Y PIT 97
4	0-25	mzc1	10YR43 00					5	1	HR	7				Y
	25-30	mzc1	10YR44 00					0	0	HR	7		M		Y
	30-35	mzc1	10YR54 00					0	0	CH	50		M		Y
	35-65	ch	22XX22 00					0	0	HR	2		P		Y IMP CHALK 50
4P	0-26	mzc1	10YR42 43					5	1	HR	12				
	26-49	hzc1	10YR44 00					0	0	HR	30		M		
	49-70	c	75YR44 00					0	0	HR	50		M		PIT IMP FLINTS 70
5	0-25	z1	10YR43 00					12	5	HR	12				
	25-40	mzc1	75YR54 00					0	0	HR	12		M		IMP FLINTS 40
5P	0-28	mzc1	10YR43 00					3	0	HR	5				
	28-55	mzc1	10YR54 00					0	0	HR	48		M		PIT IMP FLINTS 55
6	0-25	mzc1	10YR43 00					5	1	HR	7				Y
	25-32	c	75YR44 00					0	0	HR	7		M		Y
	32-60	mzc1	10YR64 00					0	0	CH	30		M		Y
	60-75	ch	22XX22 00					0	0	HR	2		P		Y IMP CHALK 70
7	0-23	mzc1	10YR43 00					10	3	HR	12				Y
	23-30	mzc1	10YR44 00					0	0	HR	12		M		Y
	30-35	mzc1	10YR44 00					0	0	CH	50		M		Y
	35-60	ch	22XX22 00					0	0	HR	2		P		Y IMP CHALK 60

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED COL.	----STONES-----			STRUCT/ CONSIST	SUBS			CALC	
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR		POR
8	0-23	mzc1	10YR43 00					15	3	HR	15				Y	
	23-38	mzc1	10YR44 00					0	0	HR	15	M			Y	
	38-65	ch	22XX22 00					0	0	HR	2	P			Y	IMP CHALK 65
9	0-23	mzc1	10YR43 00					2	0	HR	3				Y	
	23-38	hzc1	10YR44 00					0	0	HR	3	M			Y	
	38-65	ch	22XX22 00					0	0	HR	2	P			Y	IMP CHALK 65
10	0-25	mzc1	10YR43 00					8	1	HR	8					
	25-50	hzc1	75YR54 00					0	0	HR	10	M			Y	IMP CHALK/FLINTS 75
	50-75	mzc1	10YR64 00					0	0	CH	35	M			Y	+10% FLINTS
11	0-28	mzc1	10YR43 00					10	7	HR	10					
	28-35	hzc1	75YR54 00					0	0	HR	10	M			Y	
	35-75	c	10YR44 46					0	0	HR	10	M			Y	IMP CHALK/FLINTS 75
12	0-23	mzc1	10YR43 00					0	0	HR	7				Y	
	23-33	hzc1	75YR54 00					0	0	HR	10	M			Y	IMP FLINTS 33
13	0-23	mzc1	10YR43 00					5	1	HR	5				Y	
	23-40	mzc1	10YR44 00					0	0	HR	5	M			Y	
	40-65	ch	22XX22 00					0	0	HR	2	P			Y	IMP CHALK 65
14	0-25	mzc1	10YR43 00					5	1	HR	5					
	25-80	hzc1	10YR44 00					0	0	HR	5	M				
	80-100	c	75YR54 00					0	0	HR	5	M				IMP FLINTS 100
15	0-23	mzc1	10YR43 00					5	1	HR	6				Y	
	23-35	mzc1	10YR44 00					0	0	HR	6	M			Y	
	35-55	mzc1	10YR64 00					0	0	CH	50	M			Y	+5% FLINTS
	55-65	ch	22XX22 00					0	0	HR	2	P			Y	IMP CHALK 65
16	0-25	mzc1	10YR43 00					2	0	HR	5					
	25-48	c	10YR44 00	10YR43 00				0	0	HR	5	M				
	48-80	c	75YR44 81					0	0	CH	25	M			Y	
	80-85	ch	00ZZ00 00					0	0	HR	2	P			Y	IMP CHALK 80
17	0-25	hzc1	10YR43 00					2	0	HR	5					
	25-60	c	75YR44 00					0	0	HR	5	M				
	60-70	ch	10YR54 81					0	0	HR	2	P			Y	IMP CHALK 70
18	0-25	hzc1	10YR43 00					1	0	HR	5					
	25-40	c	75YR44 00					0	0	HR	5	M				
	40-60	c	10YR44 81					0	0	CH	30	M			Y	IMP CHALK 60
19	0-23	z1	10YR44 00					2	1	HR	5					
	23-34	mzc1	10YR44 00					0	0	HR	5	M				
	34-55	mzc1	10YR74 81					0	0	CH	70	P			Y	IMP CHALKY DRIFT 55

MPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES-----			STRUCT/ CONSIST	SUBS			CALC		
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH		TOT	STR	POR		IMP	SPL
20	0-26	mzc1	10YR42 00						10	3	HR	12						SMALL PIT TO 40
	26-60	c	10YR44 00						0	0	HR	40		M				
	60-70	c	75YR46 00						0	0	HR	25		M				
	70-80	c	75YR46 00				C		S	0	0	HR	25		P		Y	IMP FLINTS 80
21	0-25	hc1	10YR42 00						4	1	HR	5						
	25-35	hc1	10YR43 00						0	0	HR	5		M				
	35-70	c	10YR44 00						0	0	HR	10		M				
	70-80	ch	22XX22 00						0	0	HR	2		P				IMP CHALK/FLINTS 80
22	0-25	hzc1	10YR43 00						2	0	HR	5						
	25-35	hzc1	10YR44 00						0	0	HR	5		M				
	35-65	c	75YR46 00						0	0	HR	10		M				
	65-70	ch	10YR81 46						0	0	HR	2		P			Y	
	70-80	ch	00ZZ00 00						0	0	HR	2		P			Y	IMP CHALK 70
23	0-23	hzc1	10YR42 43						4	0	HR	5					Y	
	23-38	hc1	10YR44 00						0	0	HR	5		M			Y	
	38-65	ch	22XX22 00						0	0	HR	2		P			Y	IMP CHALK 65
24	0-25	mzc1	10YR52 00						5	0	CH	7					Y	
	25-60	ch	22XX22 00						0	0	HR	2		M			Y	IMP CHALK 60
25	0-25	mzc1	10YR42 43						3	1	HR	5					Y	
	25-60	ch	22XX22 00						0	0	HR	2		P			Y	IMP CHALK 60
26	0-23	mzc1	10YR42 00						2	0	HR	5						
	23-33	hzc1	10YR44 00						0	0	HR	5		M				
	33-55	c	10YR44 46				F		S	0	0	HR	5		M			
	55-70	c	10YR44 46						S	0	0	CH	10		M		Y	
	70-90	ch	22XX22 00						S	0	0	HR	2		P		Y	IMP CHALK 90
27	0-23	mzc1	10YR42 00						3	1	HR	5						
	23-50	mzc1	10YR44 00						0	0	HR	20		M				IMP FLINTS 50
28	0-23	mzc1	10YR42 43						8	1	HR	9					Y	
	23-60	ch	22XX22 00						0	0	HR	2		P			Y	
29	0-25	mzc1	10YR43 00						7	4	HR	7					Y	
	25-35	hzc1	10YR44 00						0	0	HR	10		M			Y	
	35-60	c	10YR44 46						0	0	HR	10		M			Y	
	60-80	ch	22XX22 00						0	0	HR	2		P			Y	IMP CHALK 80
30	0-23	mzc1	10YR42 00						5	4	HR	10						SMALL PIT TO 35
	23-40	hzc1	10YR43 00						0	0	HR	40		M				
	40-60	c	75YR46 00						0	0	HR	15		M				IMP FLINTS 60
31	0-23	mzc1	10YR42 43						2	1	HR	3						
	23-33	hzc1	10YR44 00						0	0	HR	5		M				
	33-60	c	10YR44 46						0	0	HR	5		M				
	60-85	c	75YR44 00						0	0	HR	5		M				IMP FLINTS 85

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----- PED			----STONES-----			STRUCT/ CONSIST	SUBS STR POR IMP SPL CALC						
				COL	ABUN	CONT	COL.	GLE	>2			>6	LITH	TOT			
32	0-23	mzc1	10YR42 43					2	1	HR	3						
	23-30	hzc1	10YR44 00					0	0	HR	5		M				
	30-70	c	75YR44 00					0	0	HR	5		M				Y
	70-90	ch	22XX22 00					0	0	HR	2		M				Y
																	IMP CHALK 90
33	0-23	mzc1	10YR42 43					2	0	HR	3						
	23-40	mzc1	10YR44 00					0	0	HR	5		M				
	40-100	c	75YR44 00					0	0	HR	5		M				
																	CH TRACE@100 IMP100
34	0-25	mzc1	10YR42 43					8	4	HR	8						Y
	25-40	mzc1	10YR53 54					0	0	HR	5		M				Y
	40-45	mzc1	10YR53 54					0	0	HR	20		M				Y
																	IMP FLINTS 45
35	0-25	mzc1	10YR43 00					4	1	HR	5						Y
	25-35	mzc1	10YR54 00					0	0	CH	50		M				Y
	35-60	ch	22XX22 00					0	0	HR	2		P				Y
																	+5% FLINTS IMP CHALK 60
36	0-23	hzc1	10YR42 00					10	4	HR	15						
	23-70	c	05Y 46 00					0	0	HR	40		P				
																	IMP FLINTS 70 PLASTIC CLAY 23+
37	0-25	mzc1	10YR43 00					10	5	HR	15						Y
	25-60	ch	22XX22 00					0	0	HR	2		P				Y
																	IMP CHALK 60
38	0-25	mzc1	10YR42 43					5	3	HR	7						
	25-45	mzc1	10YR43 44					0	0	HR	20		M				Y
																	IMP FLINTS 45
39	0-23	mzc1	10YR43 00					5	0	HR	5						
	23-45	mzc1	10YR44 00					0	0	HR	15		M				
	45-50	c	10YR44 00					0	0	HR	40		M				
																	IMP FLINTS 50
40	0-20	mzc1	10YR42 43					5	0	HR	5						
	20-50	z1	10YR43 00					0	0	HR	7		M				
																	IMP FLINTS 50
41	0-22	z1	10YR43 00					7	0	HR	12						Y
	22-30	mzc1	10YR54 73					0	0	CH	20		M				Y
	30-45	mzc1	10YR54 81					0	0	CH	80		M				Y
	45-50	ch	10YR81 00					0	0	HR	2		P				Y
																	IMP CHALK 50
42	0-25	z1	10YR43 00					3	0	HR	10						Y
	25-40	mzc1	10YR54 00					0	0	CH	20		M				Y
	40-55	mzc1	10YR54 64					0	0	CH	35		M				Y
	55-60	mzc1	10YR64 81					0	0	CH	60		P				Y
	60-70	ch	10YR81 00					0	0	HR	2		P				Y
																	IMP CHALK 60
43	0-25	mzc1	10YR43 00					6	0	HR	15						
	25-30	mzc1	10YR44 46					0	0	HR	30		M				
																	IMP FLINTS 30
44	0-25	mzc1	10YR43 00					2	0	HR	8						Y
	25-30	mzc1	10YR54 56					0	0	CH	20		M				Y
	30-60	ch	10YR81 74					0	0	HR	2		P				Y
																	+5% FLINTS IMP CHALK/FLINTS 40

AMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED COL.	----STONES-----			STRUCT/ CONSIST	SUBS			CALC
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	
45	0-25	z1	10YR43 00					5	0	HR	10				Y
	25-30	mzc1	10YR54 00					0	0	CH	30	M			Y
	30-60	ch	10YR81 74					0	0	HR	2	P			Y
IMP CHALK 60															
46	0-25	mzc1	10YR43 00					3	0	HR	7				
	25-37	hzc1	10YR56 00					0	0	HR	5	M			
	37-40	mzc1	10YR74 81					0	0	CH	80	P			Y
	40-65	ch	10YR81 00					0	0	HR	2	P			Y
IMP CHALK 50															
47	0-30	mzc1	10YR43 00					12	0	HR	17				Y
	30-55	mzc1	10YR54 64					0	0	CH	15	M			Y
	55-65	mzc1	10YR74 81					0	0	CH	80	P			Y
+5% FLINTS IMP CHALKY DRIFT 65															
48	0-25	mzc1	10YR44 54					1	0	HR	5				
	25-40	mzc1	10YR54 00					0	0	HR	5	M			
	40-55	hzc1	10YR54 64					0	0	HR	10	M			
	55-60	c	10YR56 00					0	0	HR	15	M			
	60-90	c	75YR46 00	25Y 42 00 F				0	0	HR	20	M			Y
	90-92	ch	10YR81 00					0	0	HR	2	P			Y
IMP CHALK 92															
49	0-27	mzc1	10YR43 44					2	0	HR	8				
	27-45	c	10YR56 00					0	0	HR	15	M			Y
	45-50	hzc1	10YR54 64					0	0	CH	10	M			Y
	50-55	ch	10YR81 64					0	0	HR	2	P			Y
	55-65	ch	10YR81 00					0	0	HR	2	P			Y
	IMP CHALK 55														
50	0-28	mzc1	10YR43 54					6	0	HR	11				Y
	28-45	ch	10YR81 44					0	0	HR	2	P			Y
	45-65	ch	00ZZ00 00					0	0	HR	2	P			Y
IMP CHALK 40															
51	0-28	mzc1	10YR44 54					1	0	HR	5				
	28-38	hzc1	75YR46 56					0	0	HR	5	M			Y
	38-45	mzc1	10YR74 81					0	0	CH	30	M			Y
	45-50	ch	10YR81 54					0	0	HR	2	P			Y
	50-65	ch	00ZZ00 00					0	0	HR	2	P			Y
IMP CHALK 50															
52	0-20	mzc1	10YR43 00					10	0	HR	15				Y
	20-28	mzc1	10YR56 00					0	0	CH	20	M			Y
	28-40	ch	10YR81 54					0	0	HR	2	P			Y
	40-65	ch	00ZZ00 00					0	0	HR	2	P			Y
IMP CHALK 40															
53	0-27	mzc1	10YR43 00					2	0	HR	5				
	27-48	c	10YR54 56	00MN00 00 C				0	0	HR	5	M			
	48-68	hzc1	10YR64 81					0	0	CH	50	P			Y
	68-70	ch	10YR81 64					0	0	HR	2	P			Y
IMP CHALK 70															
54	0-30	mzc1	10YR43 53					3	0	HR	5				Y
	30-58	ch	10YR81 64					0	0	HR	2	P			Y
	58-60	ch	10YR81 00					0	0	HR	2	P			Y
+10% CHALK IMP CHALK 65															

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES----			STRUCT/ CONSIST	SUBS			CALC	
				COL	ABUN	CONT	COL.	GLE	>2	>6	LITH		TOT	STR	POR		IMP
55	0-25	mzc1	10YR43 00						1	0	HR	3					Y
	25-38	mzc1	10YR44 00						0	0	HR	3		M			Y
	38-48	ch	10YR81 54						0	0	HR	2		P			Y 20% SOIL IN CHALK
	48-50	ch	10YR81 00						0	0	HR	2		P			Y
	50-65	ch	00ZZ00 00						0	0	HR	2		P			Y IMP CHALK 50
56	0-20	mzc1	10YR43 00						1	0	HR	3					
	20-40	hzc1	10YR44 54						0	0	HR	3		M			
	40-50	hzc1	10YR44 54						0	0	HR	20		M			IMP FLINTS 50
57	0-28	mzc1	10YR43 00						3	0	HR	5					
	28-55	mzc1	10YR54 00						0	0	HR	48		M			IMP FLINTS 55
58	0-28	mzc1	10YR42 00						1	0	HR	7					Y
	28-40	ch	10YR81 54						0	0	HR	2		P			Y
	40-60	ch	00ZZ00 00						0	0	HR	2		P			Y IMP CHALK 40
59	0-30	mzc1	10YR43 00						1	0	HR	3					
	30-60	hzc1	10YR44 00						0	0	HR	5		M			
	60-80	c	10YR44 00						0	0	HR	5		M			IMP FLINTS 80
60	0-25	mzc1	10YR42 43						4	0	HR	8					Y
	25-30	mzc1	10YR54 00						0	0	HR	35		M			Y IMP FLINTS 30
61	0-23	mzc1	10YR44 00						2	0	HR	5					Y
	23-33	mzc1	10YR44 54						0	0	HR	5		M			Y
	33-55	ch	10YR81 54						0	0	HR	2		P			Y
	55-60	ch	10YR81 00						0	0	HR	2		P			Y IMP CHALK 70
62	0-25	hzc1	10YR43 00						2	0	HR	6					
	25-45	c	10YR44 54	10YR56 00 F					0	0	HR	5		M			
	45-60	c	10YR54 00						0	0	CH	15		M			Y +5% FLINTS
	60-65	hzc1	10YR54 00						0	0	CH	50		M			+5% FLINTS
	65-80	ch	00ZZ00 00						0	0	HR	2		P			IMP CHALKY DRIFT 65
63	0-30	hzc1	10YR43 00						1	0	HR	5					
	30-90	c	75YR58 00	25Y 43 00 F			00M00 00		0	0	HR	10		M			IMP FLINTS 90
64	0-28	mzc1	10YR43 00						1	0	HR	5					
	28-45	c	75YR58 00	00M00 00 F					0	0	HR	3		M			
	45-52	c	75YR58 00	00M00 00 F					0	0	HR	20		M			IMP FLINTS 52
65	0-28	mzc1	10YR43 00						2	0	HR	8					
	28-32	mzc1	10YR44 54						0	0	HR	35		M			IMP FLINTS 32
66	0-28	mzc1	10YR43 00						3	0	HR	10					
	28-40	hzc1	10YR44 54						0	0	HR	15		M			IMP FLINTS 40

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED COL.	----STONES-----			STRUCT/ CONSIST	SUBS						
				COL	ABUN	CONT		GLY	>2	>6		LITH	TOT	STR	POR	IMP	SPL	CALC
67	0-30	hzc1	10YR43 00					1	0	HR	3							
	30-80	c	75YR58 00	25Y	43	00	F	00M	00	00	00	5	M					IMP FLINTS 80
68	0-25	mzc1	10YR43 00					2	0	HR	8							Y
	25-37	mzc1	10YR44 54					0	0	HR	8	M						Y
	37-45	ch	10YR81 54					0	0	HR	2	P						Y
	45-65	ch	00ZZ00 00					0	0	HR	2	P						Y
69	0-30	mzc1	10YR43 00					1	0	HR	5							Y
	30-38	hzc1	10YR44 54					0	0	HR	5	M						Y
	38-60	mzc1	10YR64 81					0	0	CH	50	P						Y
	60-70	ch	00ZZ00 00					0	0	HR	2	P						Y
70	0-28	mzc1	10YR43 00					3	0	HR	8							
	28-35	mzc1	10YR44 54					0	0	HR	45	M						IMP FLINTS 35
71	0-20	mzc1	10YR43 00					0	0	HR	3							Y
	20-45	hzc1	10YR44 54					0	0	HR	5	M						Y
	45-55	ch	10YR81 54					0	0	HR	2	P						Y
	55-65	ch	00ZZ00 00					0	0	HR	2	M						Y
72	0-30	mzc1	10YR43 44					3	0	HR	10							Y
	30-58	hzc1	10YR54 81					0	0	CH	40	M						Y
	58-60	ch	10YR81 00					0	0	HR	2	P						Y
	60-70	ch	00ZZ00 00					0	0	HR	2	P						Y
73	0-26	mzc1	10YR44 54					3	0	HR	8							
	26-30	hzc1	10YR56 54					0	0	HR	30	M						IMP FLINTS 30
74	0-30	mzc1	10YR44 54					3	0	HR	10							IMP FLINTS 30
75	0-28	mzc1	10YR43 00					3	0	HR	10							
	28-40	hzc1	10YR44 00					0	0	HR	8	M						
	40-55	c	10YR46 00					0	0	HR	10	M						
	55-60	c	10YR46 00					0	0	HR	15	M						IMP FLINTS 60
76	0-20	mzc1	10YR43 00					3	0	HR	12							
	20-38	mzc1	10YR44 46					0	0	HR	20	M						
	38-40	mzc1	10YR46 00					0	0	HR	35	M						IMP FLINTS 40
77	0-25	mzc1	10YR43 00					3	0	HR	10							
	25-40	mzc1	10YR44 00					0	0	HR	15	M						
	40-50	hzc1	10YR44 00					0	0	HR	25	M						
	50-60	c	75YR44 56					0	0	HR	25	M						
	60-62	c	75YR44 81					0	0	CH	30	M						Y
78	0-25	hzc1	10YR43 00					2	0	HR	8							
	25-35	c	75YR44 00					0	0	HR	10	M						
	35-120	c	05YR46 00	00M	00	00	F	0	0	HR	10	M						CHALK TRACE @ 120

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED COL.	----STONES----				STRUCT/ CONSIST	SUBS			CALC	
				COL	ABUN	CONT		GLE	>2	>6	LITH		TOT	STR	POR		IMP
79	0-22	hzc1	10YR43 00					5	0	HR	10					Y	
	22-48	c	75YR54 00					0	0	CH	20	M				Y	
	48-58	ch	10YR81 64					0	0	HR	2	M				Y	
	58-70	ch	00ZZ00 00					0	0	HR	2	P				Y	IMP CHALK 58
80	0-20	hzc1	10YR43 00					3	0	HR	8					Y	
	20-38	c	75YR44 00					0	0	HR	5	M				Y	
	38-60	hzc1	10YR54 81					0	0	CH	60	P				Y	
	60-70	ch	00ZZ00 00					0	0	HR	2	P				Y	IMP CHALK 60
81	0-25	hzc1	10YR43 44					2	0	HR	8						
	25-55	c	10YR46 00					0	0	HR	5	M					
	55-70	c	75YR46 00					0	0	HR	15	M					
	70-80	ch	00ZZ00 00					0	0	HR	2	P				Y	IMP CHALK 70
82	0-25	mzc1	10YR43 00					4	0	HR	10						
	25-45	c	75YR46 00					0	0	HR	10	M					
	45-50	c	75YR46 00					0	0	HR	15	M					IMP FLINTS 50
83	0-25	mzc1	10YR43 00					2	0	HR	6						
	25-50	mzc1	10YR44 54					0	0	HR	10	M					
	50-60	hzc1	10YR44 54					0	0	HR	10	M					
	60-80	c	75YR46 00					0	0	HR	15	M					IMP FLINTS 80
84	0-24	hzc1	10YR42 43					8	2	HR	12						
	24-30	c	75YR46 00					0	0	HR	50	M					
	30-31	c	00ZZ00 00					0	0	HR	50	M					IMP FLINTS 30
85	0-20	mzc1	10YR43 00					1	0	HR	8						
	20-35	hzc1	10YR44 46					0	0	HR	10	M					
	35-50	c	75YR46 00					0	0	HR	25	M					IMP FLINTS 50
86	0-28	mzc1	10YR43 44					5	0	HR	10						
	28-65	c	75YR46 00	00MN00	00	F		0	0	HR	25	M					IMP FLINTS 65
87	0-30	mzc1	10YR43 00					5	0	HR	14						
	30-75	hzc1	10YR44 00					0	0	HR	20	M					IMP FLINTS 75
88	0-25	hzc1	10YR43 00					2	0	HR	6						
	25-50	c	10YR46 00					0	0	HR	5	M					
	50-80	c	75YR46 00	00MN00	00	F		0	0	HR	5	M					
	80-100	ch	10YR81 00					0	0	HR	2	P				Y	ROOTS TO 100 IN CH
89	0-25	hzc1	10YR43 00					2	0	HR	8						
	25-45	c	10YR44 46					0	0	HR	5	M					
	45-90	c	75YR44 46	25Y 43	00	F	00MN00	00	0	0	HR	10	M				
	90-100	ch	10YR81 00					0	0	HR	2	P				Y	IMP CHALK 100

SAMPLE	DEPTH	TEXTURE	COLOUR	---MOTTLES---			PED COL.	----STONES----			STRUCT/ CONSIST	SUBS STR	POR	IMP	SPL	CALC
				COL	ABUN	CONT		GLE	>2	>6						
90	0-25	hzc1	10YR43 00					2	0	HR	10					
	25-35	hzc1	10YR44 46					0	0	HR	15	M				
	35-55	c	75YR46 00					0	0	HR	25	M				
	55-80	mzc1	10YR64 81					0	0	CH	25	M		Y		IMP CHALKY DRIFT 80 +10% FLINTS
91	0-28	mzc1	10YR42 00					5	0	HR	12					Y
	28-40	mzc1	10YR43 44					0	0	HR	10	M				Y
	40-80	mzc1	10YR44 00					0	0	HR	25	M		Y		IMP FLINTS 80
92	0-38	mzc1	10YR44 54					1	0	HR	8					Y
	38-65	ch	10YR81 00					0	0	HR	2	P		Y		IMP CHALK 45
93	0-30	mzc1	10YR43 53					1	0	HR	10					Y
	30-45	mzc1	10YR54 00					0	0	CH	20	M				Y
	45-75	mzc1	10YR64 81					0	0	CH	50	M				Y
	75-85	ch	10YR81 74					0	0	HR	2	P		Y		IMP CHALK 85
94	0-25	mzc1	10YR43 00					4	0	HR	15					
	25-40	hzc1	10YR44 00					0	0	HR	25	M				IMP FLINTS 40
95	0-28	hzc1	10YR43 44					5	0	HR	15					
	28-45	c	10YR58 00					0	0	HR	15	M				IMP FLINTS 60
	45-60	c	10YR58 00	00MNO0	00	F		0	0	HR	30	M				OCC. OCHREOUS MOTS
96	0-25	hzc1	10YR43 00					1	0	HR	5					
	25-40	c	10YR46 00					0	0	HR	5	M				
	40-120	c	10YR56 00	00MNO0	00	F		0	0	HR	10	M				
97	0-25	hzc1	10YR43 00					1	0	HR	5					
	25-60	c	10YR56 00	00MNO0	00	F		0	0	HR	5	M				
	60-75	ch	10YR81 64					0	0	HR	2	P		Y		IMP CHALK 60
98	0-28	hzc1	10YR43 00					2	0	HR	7					
	28-50	hzc1	10YR44 46					0	0	HR	5	M				
	50-85	c	75YR46 00	00MNO0	00	F		0	0	HR	10	M				
	85-90	hzc1	10YR66 81					0	0	CH	50	P		Y		IMP CHALKY DRIFT 90
99	0-30	hzc1	10YR43 00					2	0	HR	7					
	30-70	c	75YR46 00					0	0	HR	10	M				
	70-85	hzc1	10YR56 81					0	0	CH	30	M		Y		IMP CHALK/FLINTS 85
100	0-20	hzc1	10YR43 44					1	0	HR	5					
	20-35	c	10YR46 00					0	0	HR	5	M				
	35-75	c	10YR58 81					0	0	CH	40	M				Y
	75-85	hzc1	10YR64 81					0	0	CH	70	P		Y		IMP CHALKY DRIFT 85
101	0-23	hzc1	10YR43 00					2	0	HR	6					
	23-50	c	10YR44 46					0	0	HR	10	M				
	50-60	c	75YR46 56					0	0	HR	30	M				IMP FLINTS 60

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----		PED COL.	----STONES----			STRUCT/ CONSIST	SUBS STR POR	IMP	SPL	CALC
				COL	ABUN		CONT	GLE	>2					
102	0-25	mzc1	10YR42 00				1	0	HR	5				
	25-40	hzc1	10YR44 00				0	0	HR	5	M			
	40-90	c	75YR46 00	00MN00	00 F		0	0	HR	15	M			IMP FLINTS 90
103	0-23	mzc1	10YR42 00				0	0	HR	5				
	23-75	hzc1	10YR46 00				0	0	HR	15	M			IMP FLINTS 75
104	0-25	hzc1	10YR43 00				1	0	HR	6				
	25-40	c	10YR44 54				0	0	HR	5	M			
	40-60	c	75YR46 00				0	0	HR	5	M			
	60-90	mzc1	10YR64 81				0	0	CH	65	P		Y	IMP CHALKY DRIFT 90
105	0-25	hzc1	10YR43 00				1	0	HR	5				
	25-40	c	10YR46 00				0	0	HR	5	M		Y	+5% CHALK
	40-50	c	10YR56 81				0	0	CH	30	M		Y	
	50-75	hzc1	10YR54 81				0	0	CH	70	P		Y	
	75-90	ch	10YR81 00				0	0	HR	2	P		Y	IMP CHALK 90
106	0-25	hzc1	10YR43 00				1	0	HR	4				
	25-50	hzc1	10YR44 46				0	0	HR	5	M			
	50-75	c	75YR46 00	00MN00	00 F		0	0	HR	5	M			
	75-80	ch	10YR81 00				0	0	HR	2	P		Y	IMP CHALK 80
107	0-25	hzc1	10YR43 44				1	0	HR	5				
	25-45	zc	10YR44 00				0	0	HR	5	M			
	45-120	c	75YR46 00	00MN00	00 F		0	0	HR	5	M			
108	0-25	hzc1	10YR43 00				1	0	HR	5			Y	+5% CHALK
	25-45	ch	10YR81 64				0	0	HR	2	M		Y	
	45-60	ch	00ZZ00 00				0	0	HR	2	P		Y	IMP CHALK 45
109	0-30	mzc1	10YR44 00				1	0	HR	5			Y	+5% CHALK
	30-50	ch	10YR81 64				0	0	HR	2	P		Y	
	50-60	ch	00ZZ00 00				0	0	HR	2	P		Y	IMP CHALK 50
110	0-30	mzc1	10YR43 44				2	0	HR	8			Y	+5% CHALK
	30-50	mzc1	10YR64 81				0	0	CH	50	M		Y	
	50-60	ch	10YR81 74				0	0	HR	2	P		Y	IMP CHALK 60
111	0-28	mzc1	10YR43 00				1	0	HR	6			Y	+5% CHALK
	28-55	ch	10YR81 64				0	0	HR	2	P		Y	
	55-65	ch	00ZZ00 00				0	0	HR	2	P		Y	IMP CHALK 55
112	0-28	hzc1	10YR43 44				0	0	HR	3				
	28-50	c	10YR46 00				0	0	HR	5	M			
	50-85	c	75YR46 00				0	0	HR	5	M			IMP FLINTS 85
113	0-26	hzc1	10YR43 00				3	0	HR	10				
	26-55	c	75YR46 00				0	0	HR	40	M			IMP FLINTS 55

AMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED	----STONES----				STRUCT/	SUBS	CALC		
				COL	ABUN	CONT	COL.	GLEY	>2	>6	LITH	TOT	CONSIST		STR	POR
114	0-25	mzc1	10YR43 00					3	0	HR	8				Y	
	25-50	c	10YR46 00					0	0	HR	5		M		Y	IMP CHDRIFT/FLNT 75
	50-75	mzc1	10YR54 81					0	0	CH	50		P		Y	+5% FLINTS
115	0-25	mzc1	10YR43 00					1	0	HR	5					
	25-45	hzc1	10YR44 00					0	0	HR	5		M			
	45-65	c	10YR46 00					0	0	HR	10		M			
	65-90	c	10YR46 00					0	0	CH	15		M		Y	IMP FLINTS 90
116	0-25	mzc1	10YR43 00					7	0	HR	15					
	25-80	c	10YR46 00					0	0	HR	30		M			IMP FLINTS 80
117	0-25	mzc1	10YR43 00					1	0	HR	5					IMP CH DRIFT 110
	25-55	c	10YR56 00					0	0	HR	10		M			
	55-90	c	10YR56 81					0	0	CH	15		M		Y	+10% FLINTS
	90-110	hzc1	10YR64 81					0	0	CH	30		M		Y	+10% FLINTS
118	0-22	mc1	10YR42 43					10	0	HR	20					
	22-40	mzc1	10YR44 00					0	0	HR	30		M			IMP FLINTS 40
119	0-26	mzc1	10YR43 00					8	0	HR	18					
	26-40	c	75YR46 00					0	0	HR	40		M			IMP FLINTS 40
120	0-25	mzc1	10YR43 00					3	0	HR	10					
	25-60	hzc1	10YR56 00					0	0	HR	15		M			
	60-65	hzc1	10YR56 00					0	0	HR	40		M			IMP FLINTS 65
121	0-25	mzc1	10YR43 00					14	0	HR	20					
	25-50	mzc1	10YR44 54					0	0	HR	25		M			
	50-55	hzc1	10YR44 54					0	0	HR	40		M			IMP FLINTS 55
122	0-28	mzc1	10YR43 00					5	0	HR	12					
	28-40	hzc1	10YR44 00					0	0	HR	20		M			
	40-65	c	75YR56 00	00MNO0	00	F		0	0	HR	35		M			IMP FLINTS 65
123	0-25	mzc1	10YR43 00					3	0	HR	8					
	25-45	hzc1	10YR54 56					0	0	HR	20		M			
	45-90	hzc1	10YR58 00	00MNO0	00	F		0	0	HR	25		M			IMP FLINTS 90
124	0-25	mzc1	10YR43 00					2	0	HR	8					
	25-53	hzc1	10YR44 54					0	0	HR	15		M			
	53-60	c	10YR58 00	00MNO0	00	F		0	0	HR	25		M			IMP FLINTS 60
125	0-28	mzc1	10YR43 00					8	0	HR	13					
	28-40	c	10YR58 00					0	0	HR	40		M			IMP FLINTS 40

SOIL PIT DESCRIPTION

Site Name : HANTS STRUCTURE ANDOVER Pit Number : 1P

Grid Reference: SU36804800 Average Annual Rainfall : 778 mm
 Accumulated Temperature : 1439 degree days
 Field Capacity Level : 170 days
 Land Use : Cereals
 Slope and Aspect : 01 degrees W

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 27	HZCL	10YR43 00	1	5	HR					
27- 37	C	75YR46 00	0	5	HR		MDCSAB	FR	M	
37- 52	C	75YR46 81	0	50	CH				M	Y
52- 80	CH	10YR81 00	0	2	HR				P	Y

Wetness Grade : 2 Wetness Class : I
 Gleying : cm
 SPL : cm

Drought Grade : 3A APW : 102mm MBW : 2 mm
 APP : 101mm MBP : 10 mm

FINAL ALC GRADE : 3A
 MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name : HANTS STRUCTURE ANDOVER Pit Number : 2P

Grid Reference: SU38724792 Average Annual Rainfall : 778 mm
 Accumulated Temperature : 1439 degree days
 Field Capacity Level : 170 days
 Land Use : Arable
 Slope and Aspect : 02 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 20	MZCL	10YR43 00	5	6	HR					Y
20- 26	MZCL	10YR43 44	0	8	HR				M	Y
26- 60	CH	10YR81 00	0	2	HR				P	Y

Wetness Grade : 1 Wetness Class : I
 Gleying : cm
 SPL : cm

Drought Grade : 3B APW : 76 mm MBW : -24 mm
 APP : 79 mm MBP : -12 mm

FINAL ALC GRADE : 3B
 MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name : HANTS STRUCTURE ANDOVER Pit Number : 3P

Grid Reference: SU35064800 Average Annual Rainfall : 778 mm
 Accumulated Temperature : 1439 degree days
 Field Capacity Level : 170 days
 Land Use : Ploughed
 Slope and Aspect : 01 degrees SE

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 25	HZCL	10YR43 00	0	3	HR					
25- 53	C	10YR58 00	0	3	HR		MDCSAB	FR	M	
53- 88	ϕ	75YR56 00	0	5	HR	F	MDCSAB	FM	M	
88-100	CH	10YR81 00	0	2	HR				P	Y

Wetness Grade : 2 Wetness Class : I
 Gleying : cm
 SPL : cm

Drought Grade : 2 APW : 122mm MBW : 22 mm
 APP : 116mm MBP : 25 mm

FINAL ALC GRADE : 2
 MAIN LIMITATION : Soil Wetness/Droughtiness

SOIL PIT DESCRIPTION

Site Name : HANTS STRUCTURE ANDOVER Pit Number : 4P

Grid Reference: SU34084727 Average Annual Rainfall : 778 mm
 Accumulated Temperature : 1439 degree days
 Field Capacity Level : 170 days
 Land Use : Cereals
 Slope and Aspect : 02 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 26	MZCL	10YR42 43	5	12	HR					
26- 49	HZCL	10YR44 00	0	30	HR				M	
49- 70	C	75YR44 00	0	50	HR				M	

Wetness Grade : 1 Wetness Class : I
 Gleying : cm
 SPL : cm

Drought Grade : 3A APW : 81 mm MBW : -19 mm
 APP : 90 mm MBP : -1 mm

FINAL ALC GRADE : 3A
 MAIN LIMITATION : Droughtiness

SOIL PIT DESCRIPTION

Site Name : HANTS STRUCTURE ANDOVER Pit Number : 5P

Grid Reference: SU37804820 Average Annual Rainfall : 778 mm
 Accumulated Temperature : 1439 degree days
 Field Capacity Level : 170 days
 Land Use : Cereals
 Slope and Aspect : 01 degrees W

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 28	MZCL	10YR43 00	3	5	HR					
28- 55	MZCL	10YR54 00	0	48	HR				M	

Wetness Grade : 1 Wetness Class : I
 Gleying : cm
 SPL : cm

Drought Grade : 3B APW : 74 mm MBW : -26 mm
 APP : 76 mm MBP : -15 mm

FINAL ALC GRADE : 3B
 MAIN LIMITATION : Droughtiness