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HAYWARDS HEATH LOCAL PLAN
AGRICULTURAL LAND CLASSIFICATION
ALC MAP & REPORT
JUNE 1993

HAYWARDS HEATH LOCAL PLAN, MID SUSSEX DISTRICT COUNCIL
AGRICULTURAL LAND CLASSIFICATION

1 Introduction

1 1 As part of MAFF's statutory input to the preparation of the Haywards Heath Local Plan by Mid Sussex District Council ADAS was contracted to provide land quality information on 5 sites proposed by the Council and 22 sites proposed by objectors

1 2 The Objector sites were surveyed between October and December 1992 covering a total of 171 hectares Before survey work commenced Sites 13 and 19 were excluded
The sites surveyed were -

Objector Site

Number

Site Name

1	Land at Penland Farm (15 8 ha)
2	Land South of Sunte House (4 9 ha)
3	Land North of Wickham Farm (6 0 ha)
4	Land South of Birchen Wood (9 9 ha)
5	Land East of Lindfield (29 2 ha)
6	Butler s Green Road South (2 2 ha)
7	Butler s Green Road North (3 5 ha)
8	Land West of High Street Cuckfield (2 3 ha)
9	Land West of London Road Whitemans Green (1 1 ha)
10	Land North of Bylanes Close Whitemans Green (1 1 ha)
11	Land North of Lyoth Lane (2 5 ha)
12	Land at Walstead Place Farm (43 4 ha)
14	Land at Gamblemead Fox Hill (6 3 ha)
15	Hanbury Park (1 4 ha)
16	Land North of Cuckfield Bypass (22 4 ha)
17	Land East of Ardingley Road Whitemans Green (2 3 ha)
18	Land North-west of Chatfield Road Cuckfield (1 3 ha)
20	Land South of Clearwater Lane Scaynes Hill (8 6 ha)
21	Land East of Church Road Scaynes Hill (0 3 ha)
22	Land East of Gravelye Lane Scamps Hill (6 4 ha)

1 3 The District Council sites were surveyed in January 1993 covering a total of 38 hectares The sites surveyed were -

Site 1	Great Haywards
Site 2	Bolnore Estate North
Site 3	Bolnore Estate South
Site 4	St Francis Hospital West
Site 5	St Francis Hospital East

1 4 This report describes the findings of the survey work and presents the land quality information separately for each site (see Section 3) The attached appendices and maps provide the detail

1 5 The ALC was carried out using MAFF's revised guidelines and criteria for classifying the quality of agricultural land These guidelines allow land to be graded according to the extent to which

its physical or chemical characteristics impose long-term limitations on its use for agriculture

1 6 The fieldwork was conducted by members of the Resource Planning Team within Guildford Statutory Group of ADAS

1 7 The ALC results are presented in a series of 1 5 000 maps The information is accurate at this scale but any enlargement may be misleading These maps supercede any previous ALC information for these sites especially the relevant 1" map and the 1985 1 25 000 map

2 Climate

2 1 The climatic criteria are considered first when classifying land as they 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 Detailed assessments of the prevailing climate were made for each site by interpolation from a Met Office 5km gridpoint dataset

2 4 The details of each interpolation are given separately below for each site They show that no site experiences an overall climatic limitation the area is potentially Grade 1

2 5 In addition no local climatic factors such as exposure or frost risk are deemed to be significant

2 6 The local climate has a significant indirect effect on the ALC grades in the area by its influence on soil wetness and soil droughtiness As regards soil wetness Field Capacity is an important meteorological parameter which represents the balance between rainfall and potential evapotranspiration calculated over a critical period of the growing season In combination with the soil profile characteristics these parameters will influence the flexibility of the land in a particular locality in terms of the range of cropping and the type of cultivation that may be suitable

3 Agricultural Land Classification

3 1 Objector Site 1 Land at Penland Farm

3 1 1 Table 1 below provides details of the ALC grades for the site and reveals that the majority of the agricultural area is high quality land Grades 2 and 3A

Table 1 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Survey Area</u>	<u>% of Agricultural Area</u>
2	3 4	21 5	23 9
3A	9 7	61 4	68 3
3B	1 1	7 0	<u>7 8</u>
Non Agric	1 2	7 6	100% (14 2 ha)
Urban	<u>0 4</u>	<u>2 5</u>	
TOTAL	15 8 ha	100%	

3 1 2 The details of the prevailing climate are as follows

Table 2 Climatic Interpolation

Grid reference	TQ323252	TQ323255	TQ323256
Altitude (m)	61	76	84
Average Annual Rainfall (mm)	826	832	835
Accumulated Temperature (°days)	1460	1443	1434
Field Capacity (days)	175	176	176
Moisture deficit wheat (mm)	104	102	101
Moisture deficit potatoes (mm)	96	94	93
Overall Climatic Grade	1	1	1

For the purposes of assessing the Wetness Grade of the soils on the site all of the area is assessed using the 176-225 FC day column (Table 6 Revised Guidelines)

3 1 3 A total of 11 soil observations were made on the site

3 1 4 Grade 2 A thin band of this grade runs south-eastwards through the centre of the site Soil workability is the key limitation At worst the soils may show evidence of wetness in the subsoil below 40 cm but exhibit moderate structural conditions and may be stony allowing them to fall into Wetness Class I The Medium Clay Loam topsoil textures inhibit the workability of this land at the prevailing Field Capacity Day level

3 1 5 Sub-grade 3A The majority of the site falls into this grade with soil wetness as the most limiting factor On balance the soils fall into Wetness Class II They show evidence of gleying within the top 40 cm and either have no slowly permeable layer (SPL) present within 80 cm or occasionally possess a clay SPL below approximately 60 cm (WC III)
The nature of the soil profiles developed over the Tubridge Wells Sands geology means that the subsoils are variable with thin clay or sandy horizons Where the clay occurs it is generally Moderate in structural condition

- 3 1 6 Sub-grade 3B Two small areas of this grade have been picked out where gradients are locally limiting in the range 7-11°
- 3 1 7 The areas of Non-agricultural relate to a mixture of scrub and trees
- 3 1 8 The Urban area relates to residential buildings and an access road
- 3 2 Objector Site 2 Land South of Sunte House
- 3 2 1 Table 3 below provides details of the ALC grades for the site and reveals that all of the agricultural land has been placed in Sub-grade 3A

Table 3 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Site</u>
3A	2 2	44 9
Non Agric	0 3	6 1
Urban	<u>2 4</u>	<u>49 0</u>
TOTAL	4 9 ha	100%

- 3 2 2 Table 4 provides the details of the prevailing climate

Table 4 Climatic Interpolation

Grid reference	TQ334255
Altitude (m)	61
Average Annual Rainfall (mm)	831
Accumulated Temperature (°days)	1460
Field Capacity (days)	176
Moisture deficit wheat (mm)	104
Moisture deficit potatoes (mm)	96
Overall Climatic Grade	1

- 3 2 3 Two borings were described in this site
- 3 2 4 Sub-grade 3A Soil wetness is the downgrading factor on these soils At worst the profiles exhibit signs of gleying within the top 40 cm but the subsoils are not slowly permeable Poorly structured clay horizons have approximately 5% small stone present preventing them from being described as slowly permeable The soils fall into Wetness Class II and Sub-grade 3A due to the presence of Medium Clay Loam topsoils The soils are clearly variable One of the borings could not penetrate beyond 45 cm due to the presence of a stony subsoil layer
- 3 2 5 A fringe of trees along the southern boundary has been classified as Non-agricultural
- 3 2 6 Sunte House and its curtilage have been classed as Urban

3 3 Objector Site 3 Land North of Wickham Farm

3 3 1 Table 5 below provides details of the ALC grades for the site The majority of the area is graded as Sub-grade 3A with smaller areas of Grade 2 and Sub-grade 3B

Table 5 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Site</u>	<u>% of Agricultural Area</u>
2	1 3	20 3	21 7
3A	4 6	71 9	76 7
3B	0 1	1 6	<u>1 6</u>
Non Agric	0 3	4 6	100% (6 0 ha)
Urban	<u>0 1</u>	<u>1 6</u>	
TOTAL	6 4 ha	100%	

3 3 2 Table 6 provides the details of the prevailing climate

Table 6 Climatic Interpolation

	TQ331257	TQ332255
Grid reference	TQ331257	TQ332255
Altitude (m)	53	61
Average Annual Rainfall (mm)	828	831
Accumulated Temperature (°days)	1469	1460
Field Capacity (days)	175	176
Moisture deficit wheat (mm)	105	104
Moisture deficit potatoes (mm)	97	96
Overall Climatic Grade	1	1

3 3 3 A total of seven borings were described on this site

3 3 4 Grade 2 this map unit defines a very small area with slightly lighter profiles than those adjacent The soils do not experience any significant degree of wetness but are downgraded due to a slight droughtiness limitation related to the variable presence of stony subsoils The grade boundary between Grades 2 and 3A has been drawn where this soil change occurs rather than at the 53 metre contour (where the FCD isoline goes above 175 days) This boundary makes more practical sense on the ground

3 3 5 Sub-grade 3A the majority of the Sub-grade 3A land is at or above 175 FC Days and is typified by Medium Clay Loam topsoils overlying Heavy Clay Loam and Clay subsoils The profiles show clear evidence of shallow gleying but the subsoil structural conditions fall into a moderate condition even when examined by auger sampling alone The soils are placed in Wetness Class II and experience a significant wetness limitation

3 3 6 Sub-grade 3B see para 3 4 6

3 3 7 The non-agricultural area relates to a woodland track

3 3 8 The urban map unit in the east of the site relates to a house and garden

3 4 Objector Site 4 Land South of Birchen Wood

3 4 1 Table 7 below provides details of the ALC grades for the site and shows that the majority of the agricultural land has been placed in Sub-grade 3A

Table 7 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Site</u>	<u>% of Agricultural Area</u>
2	0 3	3 0	5 5
3A	4 4	44 4	80 0
3B	0 8	8 2	<u>14 5</u>
Non Agric	<u>4 4</u>	<u>44 4</u>	100% (5 5 ha)
TOTAL	9 9 ha	100%	

3 4 2 Table 8 provides details of the prevailing climate

Table 8 Climatic Interpolation

Grid reference	TQ333258	TQ332261
Altitude (m)	53	61
Average Annual Rainfall (mm)	829	833
Accumulated Temperature (°days)	1469	1460
Field Capacity (days)	176	176
Moisture deficit wheat (mm)	105	104
Moisture deficit potatoes (mm)	97	96
Overall Climatic Grade	1	1

3 4 3 A total of 5 borings were described on the site

3 4 4 Grade 2 see para 3 3 4

3 4 5 Sub-Grade 3A soil wetness is the key limitation though the exact details of the profiles vary The soils are placed in Wetness Classes II or III depending on shallow gleying and the variable presence of slowly permeable layers Subsoil textures are Heavy Clay Loam or Clay and some subsoil horizons exhibit distinctly poor structural conditions Topsoil textures are generally Medium Clay Loam this in combination with the wetness class and the prevailing FCD level limits the workability of the soils to 3A

3 4 6 Sub-grade 3B a fringe of this grade has been mapped at the steam margin where Heavy Clay Loam topsoils overly subsoils that exhibit shallow gleying and clear slowly permeable layers These profiles are assigned to Wetness Class III and the heavy nature of the topsoil restricts the flexibility of this land by a degree worse than the adjacent 3A land

3 4 7 The map units of Non-agricultural include Birchen Wood narrow tree belts and wet scrubby sections

3 5 Objector Site 5 Land East of Lindfield

3 5 1 Table 9 provides details of the classification for this site All of the agricultural land is best and most versatile a mixture of Grades 1 2 and 3A The area surveyed (29 ha) relates to the residential development proposed by the Objector The actual area of the whole objection site is 44 ha which relates to all of the land within a proposed relief road

Table 9 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Site</u>	<u>% of Agricultural Area</u>
1	6 1	21 0	27 1
2	2 1	7 2	9 3
3A	14 3	49 1	<u>63 6</u>
Non Agric	<u>6 6</u>	<u>22 7</u>	100% (22 5 ha)
TOTAL	29 1 ha	100%	

3 5 2 Table 10 provides details of the prevailing climate All of the site falls at or below 175 FC days

Table 10 Climatic Interpolation

Grid reference	TQ355250	TQ353256	TQ351257
Altitude (m)	30	40	46
Average Annual Rainfall (mm)	818	823	826
Accumulated Temperature (°days)	1496	1484	1477
Field Capacity (days)	174	175	175
Moisture deficit wheat (mm)	108	106	105
Moisture deficit potatoes (mm)	101	99	98
Overall Climatic Grade	1	1	1

3 5 3 A total of 22 auger borings and 3 soil inspection pits were described across the site

3 5 4 Grade 1 Pit 2 is typical of the soils in this map unit Medium Clay Loam topsoils overlie deep Heavy Clay Loam upper and lower subsoils No evidence of wetness was observed in the top 100 cm and the soils have been placed in Wetness Class I (ie the soil profile is not wet within 70 cm depth for more than 30 days in most years) Subsoil structures exhibit moderate conditions and are typically moderately developed coarse subangular blocky and are stone free The textures structures and depths combine to produce an adequate amount of water available for extraction by roots to permit a droughtiness classification of Grade 1

3 5 5 Grade 2 No soil pit was located in this map unit The soils are downgraded due to a slight wetness limitation the profiles have been placed in Wetness Class II (ie the soil profile is wet within 70 cm depth for 31-90 days in most years) There is a variation in wetness characteristics in the soils with some profiles showing evidence of gleying at shallow depths but without the presence of a slowly permeable layer within 80 cm and other profiles show evidence of gleying below 40 cm with possible slowly permeable layers present from approximately 80 cm

3 5 6 Subgrade 3A The majority of the site has been placed in this grade and 2 soil pits have been described to illustrate the variation in the soils (Pit 1 and Pit 3) Soils in both the northern and southern map units of this grade are variable but subgrade 3A is believed to be the most appropriate classification Pit 1 for example was located in the southern map unit and is technically classified as Grade 2 with soil wetness as the main limitation Gleying is present within 40 cm but there is no slowly permeable layer although there is a 10 cm thick horizon between 42 and 52 cm which exhibits poor structure but which is not thick enough to be described technically as slowly permeable There is however variation across this southern unit with some thicker Heavy Clay Loam or Clay layers in the lower subsoil which may be slowly permeable but there are also borings which exhibit sandier layers which ease the profile drainage On balance therefore the land has been placed in Wetness Class III which assumes that the soil profile is wet within 70 cm depth for 91-180 days in most years This degree of wetness in combination with the Medium Clay Loam topsoil textures and the prevailing field capacity level permits this land to be placed in subgrade 3A

In the northern map unit Pit 3 describes the worst possible soils in this area technically described as subgrade 3B with a significant wetness limitation These soils exhibit shallow gleying with a slowly permeable clay layer at approximately 40 cm As a result this pit has been placed in Wetness Class IV which assumes that the soil profile is wet within 70 cm depth for more than 180 days but not within 40 cm depth for more than 210 days in most years Adjacent borings however clearly show that the majority of the land is not as wet as this slowly permeable layers in general occur below 50 cm Wetness Class III is therefore the most appropriate class for these soils producing an ALC classification of subgrade 3A given the topsoil textures (MCLs) and the prevailing field capacity level

3 5 7 The Non-agricultural map units include areas of woodland and scrub and a country path

3 6 Objector Site 6 Butler s Green Road, South

3 6 1 All of the site (2.2 ha) has been classified as Grade 2

3 6 2 Table 11 provides details of the prevailing climate The site lies on the 175 FC day line

Table 11 Climatic Interpolation

Grid reference	TQ321237
Altitude (m)	95
Average Annual Rainfall (mm)	823
Accumulated Temperature (°days)	1423
Field Capacity (days)	175
Moisture deficit wheat (mm)	100
Moisture deficit potatoes (mm)	92
Overall Climatic Grade	1

3 6 3 Grade 2 three borings were described in this map unit On balance the soils fall into Wetness Class II but exhibit varying degrees of wetness The typical sequence of horizons involves Medium Clay Loam topsoils overlying Heavy Clay Loam upper subsoils with lower subsoils of Heavy Clay Loam or Clay The soils are usually gleyed within 40 cm and either have no slowly permeable layer present within 80 cm or have an SPL starting just within 80 cm and hence are placed in Wetness Class II The topsoil texture the wetness class and the 175 FCD level combine to cause a slight wetness/workability limitation which restricts the flexibility of the land

3 7 Objector Site 7 Butler s Green Road, North

3 7 1 Table 12 provides details of the land quality on the site and shows the majority of the agricultural area to be Grade 2

Table 12 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Site</u>	<u>% of Agricultural Area</u>
2	1 9	54 3	70 4
3B	0 8	22 9	<u>29 6</u>
Non Agric	0 7	20 0	100% (2 7 ha)
Urban	<u>0 1</u>	<u>2 8</u>	
TOTAL	3 5 ha	100%	

3 7 2 Table 13 provides details of the prevailing climate All of the site is at or below 175 FC days

Table 13 Climatic Interpolation

<u>Grid reference</u>	<u>TQ322240</u>	<u>TQ322239</u>
Altitude (m)	85	90
Average Annual Rainfall (mm)	821	823
Accumulated Temperature (°days)	1434	1428
Field Capacity (days)	174	175
Moisture deficit wheat (mm)	101	101
Moisture deficit potatoes (mm)	93	92
Overall Climatic Grade	1	1

3 7 3 Three auger borings were described on the site

3 7 4 Grade 2 The soils are placed in Wetness Class II but they do show a variation in the degree of wetness observed in the profile which is typical of soils developed on this geology The soils are typically Medium Clay Loam topsoils overlying subsoils of variable texture (MCL HCL C) Generally they show evidence of wetness at depth and may possess slowly permeable layers below 75 cm On balance the profiles are placed in WC II This wetness class in combination with the topsoil texture and the 175 FC day level produces a slight workability/wetness limitation which restricts the flexibility of the land

3 7 5 Sub-grade 3B Slopes in the 7-11° range locally limit this map unit to a poorer quality

3 8 Objector Site 8 Land West of High Street, Cuckfield

3 8 1 All of the site (2 3 ha) has been classified as Sub-grade 3B

3 8 2 Table 14 provides details of the prevailing climate All of the site is at the 175 FC day level

Table 14 Climatic Interpolation

Grid reference	TQ303251	TQ304249
Altitude (m)	99	110
Average Annual Rainfall (mm)	826	829
Accumulated Temperature (°days)	1418	1405
Field Capacity (days)	175	175
Moisture deficit wheat (mm)	100	99
Moisture deficit potatoes (mm)	92	90
Overall Climatic Grade	1	1

3 8 3 Sub-grade 3B two soil borings were described on this site both falling into Wetness Class III as a result of shallow gleying with slowly permeable layers present from approximately 50-60 cm Heavy Clay Loam topsoil textures impede the flexibility of this land and restrict the grading to 3B Part of the grading also includes land which is locally in the gradient range 7-11°

3 9 Objector Site 9 Land West of London Road, Whitemans Green

3 9 1 All of this site (1 1 ha) was classified as Non-agricultural This relates to open spaces and lawns in residential use currently with no hard development

3 10 Objector Site 10 Land North of Bylanes Close, Whitemans Green

3 10 1 All of the site (1 1 ha) was classified as Sub-grade 3A

3 10 2 Table 15 provides details of the prevailing climate The site lies above the 175 FC day level

Table 15 Climatic Interpolation

Grid reference	TQ306255
Altitude (m)	114
Average Annual Rainfall (mm)	832
Accumulated Temperature (°days)	1401
Field Capacity (days)	176
Moisture deficit wheat (mm)	98
Moisture deficit potatoes (mm)	89
Overall Climatic Grade	1

3 10 3 Sub-grade 3A one soil boring describes the soils on this site where soil wetness is the main limitation The soils are deep Medium Clay Loams which are clearly gleyed at shallow depths but which do not possess slowly permeable subsoil horizons The soils are placed in Wetness Class II and this combined with the topsoil texture and the fact that the site is over 175 FC days limits the grading to 3A Similar soils elsewhere that are below 175 FC days qualify for Grade 2

3 11 Objector Site 11 Land North of Lyoth Lane

3 11 1 All of the agricultural land on this site (1 ha) has been graded as Grade 2

3 11 2 Table 16 provides details of the prevailing climate The site lies on the 175 FC day level

Table 16 Climatic Interpolation

Grid reference	TQ349242
Altitude (m)	50
Average Annual Rainfall (mm)	824
Accumulated Temperature (°days)	1473
Field Capacity (days)	175
Moisture deficit wheat (mm)	105
Moisture deficit potatoes (mm)	97
Overall Climatic Grade	1

3 11 3 Grade 2 A total of 2 auger borings was described on the agricultural area Soil wetness/workability is the key limitation on the site The soils exhibit Medium Clay Loam topsoil textures overlying upper and lower subsoils where the clay content increased with depth into Heavy Clay Loams or Clays There is a slight variation in soil wetness even within this small area Soils with very heavy subsoils exhibit a slight wetness limitation with slight evidence of shallow waterlogging in the form of mottling and pale matrix colours part of the site does not exhibit any significant wetness The subsoil structures on the site are considered to be moderate and therefore do not cause a significant obstruction to the drainage of the profile The soils fall into Wetness Class II This slight wetness in combination with the prevailing Field Capacity Day level (175 days) and the topsoil textures (MCLs) means that these soils can be graded no higher than Grade 2

3 11 4 Several houses and their grounds have been mapped as Urban

3 12 Objector Site 12 Land at Walstead Place Farm

3 12 1 Table 17 provides details of the land quality measurements for the site The majority of the site has been classified as Grade 2

Table 17 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Survey Area</u>	<u>% of Agricultural Area</u>
1	1 5	3 5	3 8
2	29 5	68 0	74 5
3A	3 3	7 6	8 3
3B	5 3	12 2	<u>13 4</u>
Woodland	2 5	5 7	100% (39 6 ha)
Non-Agric	<u>1 3</u>	<u>3 0</u>	
TOTAL	43 4 ha	100%	

3 12 2 Table 18 provides details of the prevailing climate All of the site is either at or below 175 FC days

Table 18 Climatic Interpolation

Grid reference	TQ353244	TQ356243	TQ354240	TQ351240	TQ357237
Altitude (m)	38	46	61	53	69
Average Annual Rainfall (mm)	820	821	826	824	826
Accumulated Temperature (°days)	1486	1477	1460	1469	1451
Field Capacity (days)	174	174	175	175	175
Moisture deficit wheat (mm)	107	106	104	105	103
Moisture deficit potatoes (mm)	99	98	96	97	95
Overall Climatic Grade	1	1	1	1	1

3 12 3 A total of 36 auger borings and 2 soil pits were described on the site

3 12 4 Grade 1 a small area of this grade has been mapped adjacent to Walstead Place These soils show only slight evidence of soil wetness at depth have no slowly permeable layers and may even include Loamy Fine Sand at depth They fall into Wetness Class I and have sufficient reserves of moisture in the profile to qualify for Grade 1

3 12 5 Grade 2 Pits 1 and 2 represent the soils that fall within this map unit Medium Clay Loam topsoils overlie upper subsoils of Heavy Clay Loam which may grade into lower subsoils of Clay

Pit 2 is the more typical with soils that exhibit shallow gleying but with Heavy Clay Loam subsoils that are clearly moderate in terms of their structure (Moderately Developed Coarse Subangular Blocky) and which do not significantly obstruct the drainage of the profile The soils are placed in Wetness Class II and experience a slight overall wetness limitation which is the main downgrading factor There are occasional Grade 1 profiles within this Grade 2 map unit as Pit 1 illustrates Some profiles are only gleyed below 40 cm and qualify for Wetness Class I and have sufficient reserves of moisture in the profile to overcome the local moisture deficits Some soils may experience a slight droughtiness limitation during augering for example many of the borings near Pit 1 became impenetrable between 50-70 cm perhaps illustrating a variable subsoil stone content

3 12 6 Sub-grade 3A this map unit defines variable soils Some show shallow gleying with deep SPLs (WC III) some show shallow gleying with no SPL but with a Heavy Clay Loam topsoil some are impenetrable at shallow depths

3 12 7 Sub-grade 3B a wet fringe adjacent to the stream that forms the western boundary and its dry tributary valley feature that cuts eastwards into the site have been downgraded due to soil wetness These soils show clear evidence of wetness in the profile often with shallow slowly permeable layers (Wetness Class III) Two other 3B map units define areas of locally steep slopes (7-11°)

3 12 8 The two Non-agricultural map units include the wooded stream fringe and a farm track

3 13 Objector Site 14 Land at Gamblemead, Foxhill

3 13 1 Table 19 provides the details of the grading for this site The bulk of the agricultural land has been classified as Sub-grade 3A

Table 19 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Site</u>	<u>% of Agricultural Area</u>
3A	5 6	88 9	94 9
Non Agric	0 3	4 8	<u>5 1</u>
Urban	<u>0 4</u>	<u>6 3</u>	100% (5 9 ha)
TOTAL	6 3 ha	100%	

3 13 2 Table 20 provides details of the prevailing climate All of the site lies below the 175 FC day level

Table 20 Climatic Interpolation

Grid reference	TQ332217	TQ336219
Altitude (m)	30	40
Average Annual Rainfall (mm)	786	791
Accumulated Temperature (°days)	1497	1486
Field Capacity (days)	170	171
Moisture deficit wheat (mm)	109	108
Moisture deficit potatoes (mm)	103	101
Overall Climatic Grade	1	1

3 13 3 Sub-grade 3A five borings were located in this map unit and on balance they have been placed in Wetness Class III and 3A The soils exhibit variable wetness characteristics Most exhibit shallow gleying but may or may not possess slowly permeable lower subsoils

3 13 4 Sub-grade 3B a minor topographic stream floodplain and edge slope picks out a distinctly different unit which is downgraded on microrelief and wetness

3 13 5 The road to the sewage works is marked as Urban

3 14 Objector Site 15 Hanbury Park

3 14 1 This area of unfenced land is not in agricultural use It is treated as public open space and has been classified as Non-agricultural (1 4 ha)

3 15 Objector Site 16 Land North of Cuckfield Bypass

3 15 1 Table 21 provides details of the grading for the site

Table 21 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Site</u>	<u>% of Agricultural Area</u>
1	4 7	21 0	21 7
2	7 8	34 8	35 9
3A	1 2	5 4	5 5
3B	7 7	34 4	35 5
4	0 3	1 3	<u>1 4</u>
Non Agric	0 2	0 9	100% (21 7 ha)
Urban	<u>0 5</u>	<u>2 2</u>	
TOTAL	22 4 ha	100%	

3 15 2 Table 22 provides details of the prevailing climate All of the site lies below the 175 FC day level

Table 22 Climatic Interpolation

Grid reference	TQ304240	TQ306243
Altitude (m)	60	80
Average Annual Rainfall (mm)	812	819
Accumulated Temperature (°days)	1462	1440
Field Capacity (days)	173	174
Moisture deficit wheat (mm)	105	102
Moisture deficit potatoes (mm)	98	95
Overall Climatic Grade	1	1

3 15 3 A total of 18 borings and 3 soil pits were described on the site

3 15 4 Grade 1 Pit 1 is typical of this map unit Medium Clay Loam topsoils overlie upper subsoils of similar texture with lower subsoils of Loamy Fine Sand The soils show no evidence of wetness possess moderate subsoil structural conditions and have no significant limitation to cause any downgrading

3 15 5 Grade 2 Pit 2 is located in this map unit and is technically graded as 3A on droughtiness as a result of a layer of sandstone from 40-70 cm with soil below Generally however the augering revealed a greater depth of soil above the sandstone sufficient to allow a Grade 2 classification with soil droughtiness as the key limitation

3 15 6 Sub-grade 3A a minor area of this grade identified Wetness Class III soils with shallow gleying and an SPL from below approximately 65 cm Medium Clay Loam topsoils overlie Clay upper subsoils with moderate structural conditions which become poorly structured below

3 15 7 Sub-grade 3B Pit 3 is typical of these soils which fall into Wetness Class IV as a result of shallow gleying and slowly permeable layers Poorly structured Clays (weakly developed Coarse Prismatic) occur below 40 cm and cause significant waterlogging above

- 3 15 8 Grade 4 a small area of locally steep gradients falls into this grade (11-18°)
- 3 15 9 A house gardens and entrance road have been mapped as Urban
- 3 16 Objector Site 17 Land East of Ardingley Road, Whitemans Green
- 3 16 1 Table 23 provides details of the grading of the site The majority of the land is poor quality

Table 23 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Site</u>	<u>% of Agricultural Area</u>
3A	0 3	13 0	15 8
3B	1 6	69 6	<u>84 2</u>
Non Agric	<u>0 4</u>	<u>17 4</u>	100% (1 9 ha)
TOTAL	2 3 ha	100%	

- 3 16 2 Table 24 provides details of the prevailing climate The site lies above the 175 day FC level

Table 24 Climatic Interpolation

Grid reference	TQ309254
Altitude (m)	114
Average Annual Rainfall (mm)	833
Accumulated Temperature (°days)	1401
Field Capacity (days)	176
Moisture deficit wheat (mm)	98
Moisture deficit potatoes (mm)	89
Overall Climatic Grade	1

- 3 16 3 Sub-grade 3A 1 boring describes this area that is placed in Wetness Class II as a result of shallow gleying with subsoils that exhibit moderate structural conditions Medium Clay Loam topsoils overlie upper subsoils of similar texture with lower subsoils of Clay and Sandy Clay Loam
- 3 16 4 Sub-grade 3B the eastern edge of this map unit includes locally steep slopes in the range 7-11° The higher crest top land to the west falls into Wetness Class IV as a result of shallow gleying and slowly permeable layers Clay lower subsoils clearly exhibit poor structure
- 3 16 5 An area of woodland and scrub is mapped as Non-agricultural
- 3 17 Objector Site 18 Land North-west of Chatfield Road, Cuckfield
- 3 17 1 All of the site (1 3 ha) has been classified as Non-agricultural Scrub and brambles had taken hold on the site to such an extent that it was not possible to enter The site has clearly not been in agricultural use in recent years

3 18 Objector Site 20 Land South of Clearwater Lane, Scaynes Hill

3 18 1 Table 25 provides the details of the grading of the site The majority of the agricultural land is classified as Sub-grade 3B

Table 25 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Site</u>	<u>% of Agricultural Area</u>
2	0 4	4 7	5 1
3B	7 4	86 0	<u>94 9</u>
Non Agric	0 1	1 2	100% (7 8 ha)
Urban	<u>0 7</u>	<u>8 1</u>	
TOTAL	8 6 ha	100%	

3 18 2 Table 26 provides the details of the prevailing climate The site lies below the 175 FC day level

Table 26 Climatic Interpolation

Grid reference	TQ376230	TQ371231
Altitude (m)	53	69
Average Annual Rainfall (mm)	805	815
Accumulated Temperature (°days)	1470	1452
Field Capacity (days)	172	173
Moisture deficit wheat (mm)	106	103
Moisture deficit potatoes (mm)	99	96
Overall Climatic Grade	1	1

3 18 3 A total of 8 auger borings were described over the site

3 18 4 Grade 2 Soil wetness is the main limitation in this minor area The soils here are distinctly lighter than elsewhere on the site Medium Clay Loam topsoils overlie Clay subsoils The subsoils are clearly gleyed do not possess slowly permeable layers and are placed in Wetness Class II

3 18 5 Sub-grade 3B Heavy Clay Loam or Clay topsoils overlie Clay subsoils that are gleyed and clearly slowly permeable Typically the profiles fall into Wetness Class IV and experience a significant limitation to the flexibility of the land

3 18 6 A house and track are classed as Urban A wide tree-filled field boundary are classed as Non-agricultural

3 19 Objector Site 21 Land East of Church Road, Scaynes Hill

3 19 1 All of the site (0 3 ha) has been classified as Sub-grade 3A The soils experience a wetness limitation evidenced by shallow gleying and clear slowly permeable layers from approximately 55 cm Medium Clay Loam topsoils overlie moderately structured Heavy Clay Loam upper subsoils which change into poorly structured lower subsoils of Clay The soils fall into Wetness Class III

3 19 2 The site lies below the 175 FC day level See Table 27 for details of the prevailing climate

Table 27 Climatic Interpolation

Grid reference	TQ370233
Altitude (m)	69
Average Annual Rainfall (mm)	817
Accumulated Temperature (°days)	1452
Field Capacity (days)	174
Moisture deficit wheat (mm)	103
Moisture deficit potatoes (mm)	96
Overall Climatic Grade	1

3 20 Objector Site 22 Land East of Graveley Lane, Scamps Hill Road

3 20 1 All of the site (6.4 ha) has been classified as Grade 2. Five borings were described and they show soil wetness as the main limitation. There is a variation in wetness characteristics within the site but generally the soils have been placed in Wetness Class II as a result of shallow gleying with no slowly permeable subsoils. Medium Clay Loam topsoils overlie Heavy Clay Loam upper subsoils which occasionally change into Clay subsoils all with clearly moderate conditions.

3 20 2 The site lies on the 175 FC day line See Table 28 for the details of the prevailing climate

Table 28 Climatic Interpolation

Grid reference	TQ351247
Altitude (m)	44
Average Annual Rainfall (mm)	824
Accumulated Temperature (°days)	1480
Field Capacity (days)	175
Moisture deficit wheat (mm)	106
Moisture deficit potatoes (mm)	98
Overall Climatic Grade	1

4 District Council Site 1 Great Haywards

4 1 1 Table 29 below provides details of the ALC grades for the site and reveals the majority of land to be of moderate quality subgrade 3B

Table 29 Distribution of Grades and Sub-grades

Grade	Area(ha)	% of Survey Area	% of Agricultural Area
3A	3.8	22.2	26
3B	10.8	63.2	74
Non Agric	2.5	14.6	100- (14.6 ha)
TOTAL	17.1 ha	100%	

4 1 2 The details of climate data relevant to the site are as follows

Table 30 Climatic Interpolation

Grid reference	TQ326232	TQ323232	TQ324236
Altitude (m)	55	65	75
Average Annual Rainfall (mm)	808	811	817
Accumulated Temperature (°days)	1468	1457	1445
Field Capacity (days)	173	173	174
Moisture deficit wheat (mm)	105	104	103
Moisture deficit potatoes (mm)	98	97	95
Overall Climatic Grade	1	1	1

4 1 3 A total of 15 soil auger borings were made on the site

4 1 4 Sub-grade 3A Land of this quality if mapped to the south and north east of Reading Wood Profiles typically comprise topsoils of Medium Clay Loam over upper subsoils of heavy Clay Loam or Clay containing 0-8% hard rock Lower subsoils consist of slowly permeable Clay containing 0-15% hard rock Profiles are non-calcareous and poorly drained Wetness Class III as evidenced by gleying present within 40 cm of the surface and slowly permeable layers encountered from 49-55 cm depth Within the map unit individual profiles of better quality were encountered but due to their limited number and extent were not mapped separately

4 1 5 Sub-grade 3B Moderate quality land covers the majority of the site Profiles are non-calcareous and typically comprise topsoils of Medium Clay Loam (occasionally Heavy Clay Loam) over Clay Profiles are poorly drained Wetness Class IV and III as evidenced by gleying within 40 cm of the surface and slowly permeable layers from 25-60 cm depth Consequently land is classified as Sub-grade 3B due to wetness imperfections

4 1 6 Land mapped as non-agricultural includes common land

4 2 District Council Site 2 Bolnore Estate, (North)

4 2 1 This site south of Bolnore Farm is one of two sites making up Bolnore Estate the second being Site 3 to the south

4 2 2 The whole site is classified as sub-grade 3B (4.1 hectares) due to wetness imperfections

4 2 3 The climate data relevant to the site are as follows

Table 31 Climatic Interpolation

Grid reference	TQ320233
Altitude (m)	75
Average Annual Rainfall (mm)	814
Accumulated Temperature (°days)	1446
Field Capacity (days)	174
Moisture deficit wheat (mm)	103
Moisture deficit potatoes (mm)	95
Overall Climatic Grade	1

4 2 4 A total of 4 soil auger borings were made on this site

4 2 5 Sub-grade 3B Profiles typically comprise topsoils of Heavy Clay Loam over subsoils of slowly permeable Clay which are non-calcareous with a negligible stone content Soils are assigned to Wetness Class IV as evidenced by gleying in the topsoil and slowly permeable layers from 35 cm depth Consequently land is classified as sub-grade 3B Better quality profiles were encountered but not mapped separately due to their limited number and extent

4 3 District Council Site 3 Bolnore Estate (South)

4 3 1 Table 32 below provides details of the ALC grades for the site The majority of land is non agricultural with the agricultural land for the most part being of moderate quality (Sub-grade 3B)

Table 32 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Survey Area</u>	<u>% of Agricultural Area</u>
2	1 0	7 4	28 6
3B	2 5	18 4	71 4
Non Agric	10 1	74 2	100 ^a (3 5 ha)
TOTAL	13 6 ha	100-	

4 3 2 The details of climate relevant to the site are as follows

Table 33 Climatic Interpolation

<u>Grid reference</u>	<u>TQ325226</u>	<u>TQ325225</u>	<u>TQ325224</u>
Altitude (m)	45	50	60
Average Annual Rainfall (mm)	800	801	804
Accumulated Temperature (°days)	1480	1474	1463
Field Capacity (days)	172	172	172
Moisture deficit wheat (mm)	107	106	105
Moisture deficit potatoes (mm)	100	99	98
Overall Climatic Grade	1	1	1

4 3 3 A total of 3 soil auger borings and 1 soil inspection pit were assessed on the site

4 3 4 Grade 2 Very good quality land is mapped to the south of the site on the highest land Profiles typically comprise topsoils of heavy clay loam over upper subsoils of similar texture Lower subsoils consist of Fine Sandy Loam passing to Loamy Fine Sand with 5% hard rock To the bottom of the profile Fine Sand with negligible stone is encountered Profiles are non calcareous and well drained Wetness Class I However due to the heavy nature of the topsoil land is limited to Grade 2 due to wetness/workability

4 3 5 Sub-grade 3B Moderate quality land makes up the majority of the agricultural area of the site Profiles typically comprise topsoils of Heavy Clay Loam occasionally Medium Clay Loam over upper subsoils of Clay or Heavy Clay Loam Lower subsoils consist of Clay containing 0-5% hard rock Profiles are poorly drained Wetness Class IV as evidenced by the occurrence of slowly permeable layers in the upper subsoil and gleying within 40 cm of the surface Pit 1 is typical of this soil type Within this map unit

better quality profiles were encountered but were not mapped separately due to their limited number and extent. Additionally, land is also limited to this subgrade due to a gradient limitation. Using a hand held optical clinometer, slope angles of 8-9° were recorded.

4 3 6 Areas mapped as non agricultural relate to woodland some of which had been partly cleared

4 4 District Council Site 4 St Francis Hospital (West)

4 4 1 Only a small area of the site was classified as agricultural land this being of moderate quality. Table 34 below provides details of the ALC grades and areas.

Table 34 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Survey Area</u>	<u>% of Agricultural Area</u>
3B	0.7	25.9	100% (0.7 ha)
Non Agric	2.0	74.1	
TOTAL	2.7 ha	100%	

4 4 2 2 soil auger borings were made on the site

4 4 3 Sub-grade 3B Land of this quality covers the entire agricultural land of this site. Profiles typically comprise topsoils of Medium Clay Loam over a slowly permeable Clay subsoil. Soils are non-calcareous throughout and contain negligible stone contents. Soils are assigned to Wetness Class IV and a grade of 3B as evidenced by gleying in the topsoil and being slowly permeable from 20 cm depth. One auger boring was assessed in a small area of lower lying land and found to be of better quality. However, due to its size, it was not practical to map this area separately.

4 4 4 The area mapped as non agricultural includes allotments, rubbish tips, gardens and patches of woodland.

4 5 District Council Site 5 St Francis Hospital (East)

4 5 1 Table 35 below provides details of the ALC grades for the site showing the agricultural land to be of very good quality.

Table 35 Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area(ha)</u>	<u>% of Survey Area</u>	<u>% of Agricultural Area</u>
2	2.5	86.2	100% (2.5 ha)
Non Agric	0.2	6.9	
Urban	0.2	6.9	
TOTAL	2.9 ha	100%	

4 5 2 The details of climate data relevant to the site are as follows

Table 36 Climatic Interpolation

Grid reference	TQ339227	TQ339228
Altitude (m)	70	75
Average Annual Rainfall (mm)	812	816
Accumulated Temperature (°days)	1451	1446
Field Capacity (days)	174	174
Moisture deficit wheat (mm)	103	103
Moisture deficit potatoes (mm)	95	95
Overall Climatic Grade	1	1

4 5 3 A total of 2 soil auger borings were made on the site

4 5 4 Grade 2 Land of this quality comprises topsoils of Heavy Clay Loam over upper subsoils of Heavy Clay Loam passing to Clay containing 1% hard rock by volume Lower subsoils comprise clay which exhibit signs of wetness problems beyond 80 cm depth as evidenced by gleying and slowly permeable clays With no evidence of wetness within 80 cm the soils are assigned to Wetness Class I and Grade 2 due to the heavy nature of the topsoil Individual borings with Medium Clay Loam topsoils and well drained subsoils do qualify for Grade 1 but these have not been mapped separately due to their limited extent

4 5 5 Land mapped as non agricultural includes grassed verges and flower beds

4 5 6 Land mapped as Urban is a metalled road

HAYWARDS HEATH LOCAL PLAN OBJECTOR SITES

ALC and ASP MAPS

APPENDIX I

DESCRIPTION OF THE GRADES AND SUB GRADES

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 on the 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.

Grade 3 Good To Moderate Quality Agricultural Land

Land with moderate limitations which affect the choice of crops, 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.

Sub grade 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.

Sub grade 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 (eg 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 very 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 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/airfields Also active mineral workings and refuse tips where restoration conditions to soft after uses may apply

Woodland

Includes commercial and non-commercial woodland

Agricultural Buildings

Includes the normal range of agricultural buildings as well as other relatively permanent structures such as glasshouses Temporary structures (eg 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 eg 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

REFERENCES

- * MAFF (1988) *Agricultural Land Classification of England And Wales* revised guidelines and criteria for grading the quality of agricultural land
- * *Meteorological Office (1989) Climatological Data for Agricultural Land Classification*
- * British Geological Survey (1972) Sheet No 302 Horsham 1 63 360

APPENDIX III

DEFINITION OF SOIL WETNESS CLASSES

Wetness Class I

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

Wetness Class II

The soil profile is wet within 70cm depth for 31 90 days in most years or if there is no slowly permeable layer within 80cm depth it is wet within 70cm for more than 90 days but not wet within 40cm depth for more than 30 days in most years

Wetness Class III

The soil profile is wet within 70cm depth for 91 180 days in most years or if there is no slowly permeable layer within 80cm depth it is wet within 70cm for more than 180 days but only wet within 40cm depth for 31 90 days in most years

Wetness Class IV

The soil profile is wet within 70cm depth for more than 180 days but not wet within 40cm depth for more than 210 days in most years or if there is no slowly permeable layer within 80cm depth it is wet within 40cm depth for 91 210 days in most years

Wetness Class V

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

Wetness Class VI

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

(The number of days is not necessarily a continuous period In most years is defined as more than 10 out of 20 years)

APPENDIX IVA

HAYWARDS HEATH LOCAL OBJECTOR SITES

SOIL PIT AND SOIL BORING DESCRIPTIONS

Contents	* Soil Abbreviations	Explanatory Note
	* Soil Pit Descriptions	
	* 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 **HRT** Horticultural Crops **PGR** Permanent Pasture **LEY** Ley Grass **RGR** Rough Grazing
SCR Scrub **CFW** Coniferous Woodland **DCW** Deciduous Woodland **HTH** Heathland **BOG** Bog or Marsh
FLW Fallow **PLO** Ploughed **SAS** Set aside **OTH** Other

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 **CH** Chemical **WE** Wetness **WK** Workability
DR Drought **ER** Soil Erosion Risk **WD** Combined Soil Wetness/Droughtiness **ST** Topsoil Stoniness

Soil Pits and Auger Borings

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

S Sand **LS** Loamy Sand **SL** Sandy Loam **SZL** Sandy Silt Loam **CL** Clay Loam **ZCL** Silty Clay Loam
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 MSST soft medium or coarse grained sandstone

SI soft weathered igneous or metamorphic SLST soft oolitic or dolimitic limestone

FSST soft fine grained sandstone ZR soft argillaceous or silty rocks CH chalk

GH gravel with non-porous (hard) stones GS gravel with porous (soft) stones

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	--WETNESS--		-WHEAT-		-POTS-		M REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
			GRDNT	GLEYSPL	CLASS	GRADE	AP	MB	AP	MB					
1	TQ32102570	CER NE	02	028 060	3	3A	107	5 114	20	3A			WE	3A	
2	TQ32202560	CER NE		025 075	2	3A	126	24 117	23	2			WE	3A	POSS SPL
3	TQ32302560	LEY E	03	000	1	2	126	24 114	20	2			DR	2	
4	TQ32402560	LEY E		000	1	2	105	3 117	23	3A			DR	3A	
4A	TQ32402560	LEY E		000	1	2	153	51 117	23	1			WE	3A	MN WC2
5	TQ32502560	STU W	02	025	1	2	161	59 105	11	1			WE	3A	WC2-NSPL
6	TQ32402550	ARA SE	04	000	1	2	136	34 118	24	1			WE	2	NO GLEY
7	TQ32202550	ARA NW	04	028	2	3A	130	28 117	23	2			WE	3A	NO SPL
9	TQ32302540	ARA S	04	025	2	3A	125	23 117	23	2			WE	3A	NO SPL
10	TQ32402540	STU E	03	055	1	2	085	-17 089	-5	3A			WE	2	MN CONCS
11	TQ32302530	ARA S	04	025 070	3	3A	115	13 117	23	2			WE	3A	

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED COL	----STONES----			STRUCT/ CONSIST	SUBS						
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	POR	IMP	SPL	CALC
1	0-28	mc1	10YR43 00						0	0	HR	2						
	28-50	c	25Y 73 63 000C00 00 M					Y	0	0		0						M
	50-60	c	10YR71 00 000C00 00 V					Y	0	0		0						M
	60-80	c	10YR71 00 000C00 00 V					Y	0	0		0				P	Y	Y
2	0-25	mc1	10YR43 00						0	0	HR	1						
	25-70	mc1	25Y 63 00 000C00 00 M					00MN00 00 Y	0	0		0						M
	70-75	c	10YR71 00 000C00 00 V					00MN00 00 Y	0	0		0						M
	75-100	c	10YR71 00 000C00 00 V					00MN00 00 Y	0	0		0				P	Y	Y
3	0-30	mc1	10YR43 00						0	0		0						
	30-72	mc1	10YR54 00						0	0	FSST	10						M
	72-75	fsz1	10YR76 74 10YR56 00 C						0	0	FSST	15						M
	75-80	1fs	10YR76 00 10YR56 00 C						0	0	FSST	20						M
	80-120	fsst	10YR76 00						0	0	FSST	50						P
4	0-30	mc1	10YR43 00						0	0		0						
	30-70	hc1	10YR54 00						0	0	FSST	3						M
4A	0-30	mc1	10YR43 00						0	0		0						
	30-70	hc1	10YR54 00						0	0	FSST	3						M
	70-120	mc1	10YR44 00						0	0	FSST	5						M
5	0-25	mc1	10YR53 00						0	0	FSST	3						
	25-45	hc1	10YR53 74 75YR58 00 C					Y	0	0	FSST	5						P
	45-50	fsz1	10YR53 74 75YR58 00 C					Y	0	0	FSST	5						M
	50-120	1fs	10YR71 74 75YR58 00 C					Y	0	0	FSST	10						M
6	0-32	mc1	10YR42 00						0	0		0						
	32-50	mc1	10YR43 00						0	0		0						M
	50-80	hc1	10YR54 00						0	0		0						M
	80-100	hc1	10YR54 00 000C00 00 C					00MN00 00	0	0		0						M
7	0-28	mc1	10YR53 00						0	0	HR	1						
	28-50	c	25Y 63 00 000C00 00 M					Y	0	0		0						M
	50-78	c	10YR71 00 000C00 00 V					Y	0	0		0						M
	78-100	mc1	10YR63 00 000C00 00 M					Y	0	0		0						M
9	0-25	mc1	10YR43 00						0	0		0						
	25-48	mc1	10YR53 00 000C00 00 M					00MN00 00 Y	0	0		0						M
	48-80	c	25Y 63 00 000C00 00 V					00MN00 00 Y	0	0		0						M
	80-100	c	10YR71 00 000C00 00 V					00MN00 00 Y	0	0		0						M
10	0-28	mc1	10YR43 00						0	0	FSST	2						
	28-55	hc1	10YR54 00 75YR58 00 F						0	0	FSST	6						P
	55-60	fs1	10YR71 74 75YR58 00 C					Y	0	0	FSST	10						M
11	0-25	mc1	10YR43 00						0	0		0						
	25-50	mc1	25Y 63 00 000C00 00 M					00MN00 00 Y	0	0		0						M
	50-70	c	25Y 63 00 000C00 00 V					00MN00 00 Y	0	0		0						M
	70-90	c	25Y 63 00 000C00 00 V					00MN00 00 Y	0	0		0				P	Y	Y

SAMPLE NO	GRID REF	ASPECT USE	--WETNESS--		-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRDNT	GLEYSPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	
1	TQ33452542	PGR	000	000	1	2	076	-28	076	-20	38				DR 3A IMP X 4
2	TQ33372540	PGR	028	000	2	3A	135	31	099	3	2				WE 3A

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	10YR42 00					0	0	HR	2						
	30-45	hc1	10YR43 00					0	0	HR	5		M				
2	0-28	mc1	10YR43 00					0	0		0						
	28-80	hc1	10YR53 00	10YR56 00	C			Y	0	0	FSST	5		P			
	80-120	mc1	10YR71 74	10YR56 58	C			Y	0	0	FSST	5		M			

SAMPLE NO	GRID REF	USE	ASPECT		--WETNESS--				-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRDNT	GLEYS	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT			
1	TQ331 2575	PGR N	01	000		1	2	109	4	102	5	3A					WE	2	IMP 90
2	TQ331 257	PGR N	01	065		1	2	145	40	119	22	1					WE	2	
3	TQ331 256	PGR N	02	030		2	3A	146	41	118	21	1					WE	3A	
4	TQ332 256	PGR NW	03	034		2	3A	137	32	119	22	1					WE	3A	
5	TQ332 255	PGR N	02	000 000		2	3A	126	21	118	21	2					WE	3A	
6	TQ333 256	PGR N	02	030		2	3A	110	5	118	21	2					WE	3A	
7	TQ331 258	PGR N	02	000		2	3A	138	33	118	21	1					WE	3A	

SAMPLE	DEPTH	TEXTURE	COLOUR	-----MOTTLES-----			PED COL	-----STONES-----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLEYS	>2	>6		LITH	TOT	STR	POR	IMP	SPL
1	0-30	mc1	10YR53 54					0	0	0							
	30-90	mc1	10YR54 56					0	0	MSST 30							M
2	0-30	mc1	25Y 53 00					0	0	0							
	30-65	mc1	10YR54 00					0	0	0							M
	65-75	fs1	10YR72 00 75YR56 00 C					Y	0	0	0						M
	75-85	lfs	10YR72 00 75YR58 00 C					Y	0	0	0						M
	85-100	fs	10YR72 00					Y	0	0	0						M
3	0-30	mc1	25Y 63 64 10YR56 00 F					0	0	0							
	30-35	hc1	25Y 72 00 75YR58 56 M					Y	0	0	0						M
	35-40	c	25Y 72 00 75YR56 58 M					Y	0	0	0						M
	40-65	hc1	25Y 72 00 75YR58 00 M					Y	0	0	0						M
	65-110	mc1	25Y 62 72 75YR56 58 C					Y	0	0	0						M
4	0-34	mc1	10YR53 00 10YR56 00 F					0	0	0							
	34-50	hc1	25Y 63 64 75YR58 00 C					Y	0	0	0						M
	50-100	hc1	25Y 63 00 75YR58 56 M					Y	0	0	0						M
5	0-30	mc1	10YR53 00 10YR56 00 C					Y	0	0	0						
	30-40	hc1	10YR52 00 75YR56 00 C					Y	0	0	0						M
	40-100	c	25Y 72 00 75YR58 00 M					Y	0	0	0						M
6	0-30	mc1	10YR53 00					0	0	0							
	30-50	hc1	25Y 63 00 10YR56 00 F					Y	0	0	0						M
	50-80	c	25Y 62 72 75YR56 58 C					Y	0	0	0						M
7	0-30	mc1	10YR53 00 75YR56 00 C					Y	0	0	0						
	30-45	hc1	25Y 72 63 75YR56 58 M					Y	0	0	0						M
	45-90	c	25Y 72 62 75YR56 00 M					Y	0	0	0						M
	90-110	hc1	25Y 63 00 75YR58 56 M					Y	0	0	0						M

SAMPLE NO	GRID REF	ASPECT USE	--WETNESS--		-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRONT	GLEYSPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	
1	TQ33452585	PGR	000		1	3A	137	32	119	22	1			WK	3A
2	TQ33552589	PGR	020	070	3	3A	114	9	116	19	2			WE	3A SPL
3	TQ33302580	PGR	028	065	3	3B	108	3	116	19	3A			WE	3B SPL
4	TQ33402570	PGR	05	000	055	3	3A	103	-2	115	18	3A		WE	3A SPL
5	TQ33252565	PGR	038		2	3A	121	16	117	20	2			WE	3A NO SPL

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED COL	----STONES----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	POR	IMP	SPL
1	0-35	hc1	10YR43 00					0	0	0							
	35-50	hc1	10YR53 00					0	0	0		M					
	50-100	hc1	10YR44 00	000C00	00	F		0	0	0		M					
2	0-20	mc1	10YR32 00					0	0	0							
	20-50	hc1	10YR42 00	000C00	00	V		Y	0	0	0		M				
	50-70	c	10YR52 00	000C00	00	V		Y	0	0	0		M				
	70-90	c	25Y 52 00	000C00	00	M		Y	0	0	0		P	Y		Y	
3	0-28	hc1	10YR53 00					0	0	0							
	28-45	hc1	25Y 63 00	000C00	00	M		Y	0	0	0		M				
	45-65	c	25Y 63 00	000C00	00	M		Y	0	0	0		M				
	65-80	c	10YR61 00	000C00	00	M		Y	0	0	0		P	Y		Y	
4	0-25	mzc1	10YR53 00	000C00	00	C		Y	0	0	0						
	25-55	hc1	25Y 62 00	000C00	00	M		Y	0	0	0		M				
	55-70	c	25Y 62 00	000C00	00	M		Y	0	0	0		P	Y		Y	
5	0-25	mc1	10YR53 00					0	0	0							
	25-38	mc1	25Y 63 00	000C00	00	F		0	0	0			M				
	38-70	hc1	25Y 63 00	000C00	00	C		Y	0	0	0		M				
	70-90	c	25Y 63 00	000C00	00	M		Y	0	0	0		M				

SAMPLE NO	GRID REF	ASPECT USE	--WETNESS--		-WHEAT-		-POTS-		M REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
			GRDNT	GLEY	SPL CLASS	GRADE	AP	MB	AP	MB					
1	TQ35102570	PGR S	02	065	1	1	157	51	116	17	1			1	NO SPL
1P	TQ35442505	PGR		028	2	2	118	12	116	17	2		WE	2	POSS WC3
2	TQ35102560	PGR S		000 050	3	3A	131	25	108	9	2		WE	3A	SPL 50
2P	TQ35122550	ARA		000	1	1	156	50	118	19	1			1	NO GLEY
3	TQ35202560	PGR S	02	000	1	1	166	60	118	19	1			1	
3P	TQ35282558	PGR S	01	000 040	4	3B	95	-11	104	5	3A		WE	3B	PIT TO 65
4	TQ35302560	PGR S		035 075	3	3A	118	12	117	18	2		WE	3A	SPL 75
5	TQ35402560	PGR S		000	1	1	70	-36	70	-29	3B		DR	3A	IMP X 3
6	TQ35102550	ARA N	01	000	1	1	147	41	116	17	1			1	
7	TQ35202550	PGR S	02	000	1	1	145	39	116	17	1			1	
8	TQ35302550	PGR S	02	040 050	3	3A	113	7	111	12	2		WE	3A	SPL 50
9	TQ35402550	PGR S	02	055 080	2	2	148	42	118	19	1		WE	2	SPL 80
10	TQ35502550	PGR S	03	000	2	2	162	56	116	17	1		WE	2	NOSPL
11	TQ35102540	ARA SE	02	000	1	1	74	-32	74	-25	3B		DR	3B	IMP50-3A?
12	TQ35202540	ARA SE	02	000	1	1	139	33	116	17	1			1	
19	TQ35502530	PGR S		000 085	2	2	139	33	117	18	1		WE	2	Q FLOOD
20	TQ35602530	PGR		045	1	2	155	49	117	18	1		WE	2	FPLAIN
22	TQ35402520	PGR S	05	000	1	1	158	52	120	21	1			1	Q FLOOD
23	TQ35502520	PGR		028 038	4	3B	89	-17	95	-4	3A		WE	3B	SPL 38
24	TQ35602520	PGR		025	2	2	143	37	129	30	1		WE	2	NO SPL
25	TQ35302510	PGR S		000	2	2	124	18	114	15	2		WE	2	NO SPL
26	TQ35402510	PGR S		035	2	2	159	53	119	20	1		WE	2	NO SPL
27	TQ35502510	PGR		060	1	1	156	50	117	18	1		WE	2	POSS WC2
28	TQ35302500	PGR S		042 055	3	3A	105	-1	113	14	3A		WE	3A	SPL 55
29	TQ35402500	PGR S		025	2	2	144	38	120	21	1		WE	2	NO SPL

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----		PED CONT	COL	----STONES----			STRUCT/ CONSIST	SUBS					
				COL	ABUN			GLEY	>2	>6		LITH	TOT	STR	POR	IMP	SPL
1	0-30	mc1	10YR42 00	000M00	00 F			0	0	HR	1						
	30-65	mc1	10YR54 00	000M00	00 F			0	0	HR	2		M				
	65-95	sc1	25Y 52 62	75YR56	00 C			Y	0	0	FSST	5		M			
	95-120	fs1	25Y 52 62	75YR56	58 C			Y	0	0	FSST	15		M			
1P	0-28	mc1	10YR52 00					0	0	HR	1						
	28-42	hzc1	25Y 62 00	10YR56	00 M			Y	0	0		0	MCSAB	F	M	Y	
	42-52	hzc1	25Y 62 00	10YR56	00 M			Y	0	0		0	MDCAB	F	P	Y	
	52-85	hzc1	25Y 62 00	75YR58	00 M			Y	0	0		0	MDMAB	FR	M	Y	
2	0-30	mc1	10YR52 53	75YR56	00 C			Y	0	0		0					
	30-40	hc1	10YR53 00	75YR56	00 C			Y	0	0	HR	2		M			
	40-120	c	10YR53 00	75YR56	58 C		00MN00	00 Y	0	0	HR	1		P			Y
2P	0-30	mc1	10YR42 00					0	0		0						
	30-58	hc1	10YR43 00				10YR42 00	0	0		0	MCSAB	FR	M			
	58-100	hc1	75YR54 00					0	0		0	MCSAB	FR	M	Y		
	100-120	hc1	75YR54 00	000C00	00 F		00MN00 00	0	0		0	MCSAB	FR	M	Y		
3	0-34	mc1	10YR53 00					0	0	HR	1						
	34-40	hc1	10YR42 00					0	0	FSST	10		M				
	40-120	fs1	10YR66 56					0	0	FSST	15		M				
3P	0-35	hc1	25Y 52 00	10YR56	00 C			Y	0	0		0					
	35-40	c	05Y 71 72	75YR58	00 M			Y	0	0		0	MCSAB	VF	M	Y	
	40-65	c	05Y 71 72	75YR58	00 M			Y	0	0		0	WDVCAB	VF	P	Y	Y
4	0-25	mc1	10YR42 00					0	0		0						
	25-35	mc1	10YR42 00					0	0		0		M				
	35-60	hc1	25Y 53 00	000C00	00 M			Y	0	0		0		M			
	60-75	c	25Y 63 00	000C00	00 M			Y	0	0		0		M			
	75-90	c	25Y 72 00	000C00	00 M			Y	0	0		0		P	Y		Y
5	0-28	mc1	10YR42 00					0	0		0						
	28-40	sc1	25Y 53 00	000C00	00 C			0	0		0		M				
	40-41	sc1	25Y 53 00	000C00	00 C			0	0		0		M				
6	0-30	mc1	10YR42 00					0	0	HR	2						
	30-45	hc1	10YR43 44	75YR56	00 F			0	0	HR	2		M				
	45-80	c	75YR56 00					0	0	HR	1		M				
	80-120	sc1	10YR54 00	75YR56	00 C		00MN00 00	0	0	HR	2		M				
7	0-30	mc1	10YR42 00					0	0	HR	1						
	30-70	hc1	10YR53 54				00MN00 00	0	0	HR	2		M				
	70-120	c	75YR54 56					0	0		0		M				
8	0-30	mc1	10YR42 00					0	0	HR	2						
	30-40	hc1	10YR53 54					0	0	HR	1		M				
	40-50	hc1	10YR53 00	75YR56	00 C		00MN00 00 Y	0	0	HR	1		M				
	50-90	c	25Y 62 63	75YR56	00 C		00MN00 00 Y	0	0		0		P				Y

SAMPLE	DEPTH	TEXTURE	COLOUR	-----MOTTLES-----			PED		-----STONES-----			STRUCT/ CONSIST	SUBS				
				COL	ABUN	CONT	COL	GLE	>2	>6	LITH		TOT	STR	POR	IMP	SPL
9	0-29	mc1	10YR42 00						0	0	HR	2					
	29-55	mc1	10YR42 43						0	0	HR	2				M	
	55-80	fs1	25Y 73 74 75YR56 00 C					Y	0	0	FSST	5				M	
	80-120	c	25Y 72 00 75YR56 00 C				00MN00	00	Y	0	0	HR	2			P	Y
10	0-30	mc1	10YR53 42 75YR56 00 C					Y	0	0	HR	2					
	30-50	mc1	25Y 63 64 75YR56 00 C					Y	0	0	FSST	5				M	
	50-80	fs1	25Y 63 73 75YR56 00 C					Y	0	0	FSST	15				M	
	80-120	lfs	25Y 63 73 75YR56 00 C					Y	0	0	FSST	20				M	
11	0-30	mc1	10YR42 00						0	0	HR	3					
	30-50	sc1	25Y 72 74						0	0	FSST	40				M	
12	0-30	mc1	10YR42 00						0	0	HR	2					
	30-65	c	75YR56 00				00MN00	00	0	0	HR	2				M	
	65-120	c	75YR56 00				10YR54	00	0	0	HR	2				M	
19	0-25	hc1	10YR42 00 000C00 00 C					Y	0	0		0					
	25-58	mc1	10YR52 00 000C00 00 M				00MN00	00	Y	0	0	0				M	
	58-85	c	25Y 52 00 000C00 00 M				00MN00	00	Y	0	0	0				M	
	85-120	c	25Y 62 00 000C00 00 M				00MN00	00	Y	0	0	0				P	Y
20	0-30	mc1	10YR42 00						0	0	HR	1					
	30-45	mc1	10YR43 00						0	0		0				M	
	45-70	mc1	25Y 63 00 000C00 00 M				00MN00	00	Y	0	0	0				M	
	70-120	hc1	25Y 63 00 000C00 00 M				00MN00	00	Y	0	0	0				M	
22	0-40	mc1	10YR42 00						0	0		0					
	40-70	mc1	10YR43 00						0	0		0				M	
	70-120	mzc1	10YR43 00						0	0		0				M	
23	0-28	mc1	10YR42 00						0	0		0					
	28-38	hc1	10YR53 00 000C00 00 C					Y	0	0		0				M	
	38-60	c	25Y 63 00 000C00 00 M					Y	0	0		0			P	Y	Y
24	0-25	z1	10YR42 00						0	0	HR	1					
	25-50	mc1	25Y 62 00 000C00 00 M				00MN00	00	Y	0	0	0				M	
	50-70	c	25Y 72 00 000C00 00 M					Y	0	0		0				M	
	70-100	sc1	25Y 72 00 000C00 00 M					Y	0	0		0				M	
25	0-30	mc1	10YR42 00 000C00 00 C					Y	0	0		0					
	30-90	sc1	25Y 72 00 000C00 00 M					Y	0	0		0				M	
26	0-35	mzc1	10YR42 00						0	0		0					
	35-120	sc1	25Y 63 00 000C00 00 M					Y	0	0		0				M	
27	0-28	mc1	10YR42 00						0	0		0					
	28-60	mc1	10YR43 00						0	0		0				M	
	60-80	sc1	10YR64 00 000C00 00 M					Y	0	0		0				M	
	80-120	hc1	10YR64 00 000C00 00 M					Y	0	0		0				M	

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED COL	----STONES----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	POR	IMP	SPL
28	0-28	mc1	10YR42 00					0	0	0							
	28-35	mc1	10YR43 00					0	0	0			M				
	35-42	mc1	10YR43 00					0	0	0			M				
	42-55	hc1	25Y 63 00 000C00 00 M					Y	0	0	0		M				
	55-75	c	25Y 63 00 000C00 00 M					Y	0	0	0		P	Y		Y	
29	0-25	mzc1	25Y 52 00					0	0	0							
	25-80	c	10YR72 00 000C00 00 M					Y	0	0	0		M				
	80-120	c	25Y 62 00 000C00 00 M					Y	0	0	0		M				

SOIL PIT DESCRIPTION

Site Name H HEATH LP SITE 5 Pit Number 1P

Grid Reference TQ35442505 Average Annual Rainfall 823 mm
 Accumulated Temperature 1484 degree days
 Field Capacity Level 175 days
 Land Use Permanent Grass
 Slope and Aspect degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT STONE	MOTTLES	STRUCTURE
0- 28	MCL	10YR5/2 00	0	1		
28- 42	HZCL	25Y 6/2 00	0	0	M	MCSAB
42- 52	HZCL	25Y 6/2 00	0	0	M	MDCAB
52- 85	HZCL	25Y 6/2 00	0	0	M	MDMAB

Wetness Grade 2 Wetness Class II
 Gleying 0/28 cm
 SPL No SPL

Drought Grade 2 APW 118mm MBW 12 mm
 APP 116mm MBP 17 mm

FINAL ALC GRADE 2
 MAIN LIMITATION Wetness

SOIL PIT DESCRIPTION

Site Name H HEATH LP SITE 5 Pit Number 2P

Grid Reference TQ35122550 Average Annual Rainfall 823 mm
 Accumulated Temperature 1484 degree days
 Field Capacity Level 175 days
 Land Use Arable
 Slope and Aspect degrees

HORIZON	TEXTURE	COLOUR	STONES >2	TOT STONE	MOTTLES	STRUCTURE
0- 30	MCL	10YR42 00	0	0		
30- 58	HCL	10YR43 00	0	0		MCSAB
58-100	HCL	75YR54 00	0	0		MCSAB
100-120	HCL	75YR54 00	0	0	F	MCSAB

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

Drought Grade 1 APW 156mm MBW 50 mm
 APP 118mm MBP 19 mm

FINAL ALC GRADE 1
 MAIN LIMITATION

SOIL PIT DESCRIPTION

Site Name H HEATH LP SITE 5 Pit Number 3P

Grid Reference TQ35282558 Average Annual Rainfall 823 mm
 Accumulated Temperature 1484 degree days
 Field Capacity Level 175 days
 Land Use Permanent Grass
 Slope and Aspect 01 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT STONE	MOTTLES	STRUCTURE
0- 35	HCL	25Y 52 00	0	0	C	
35- 40	C	05Y 71 72	0	0	M	MCSAB
40- 65	C	05Y 71 72	0	0	M	WDVCAB

Wetness Grade 3B Wetness Class IV
 Gleying 000 cm
 SPL 040 cm

Drought Grade 3A APW 95 mm MBW -11 mm
 APP 104mm MBP 5 mm

FINAL ALC GRADE 3B
 MAIN LIMITATION Wetness

SAMPLE NO	GRID REF	ASPECT USE	--WETNESS--		-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRDNT	GLEYSPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	
1	TQ32102385	PGR	045		1	1	136	36	118	26	1			1	NO SPL
2	TQ32202380	PGR	030		2	2	131	31	117	25	1		WE	2	NO SPL
3	TQ32202390	PGR	000	078	2	2	124	24	114	22	2		WE	2	DEEP SPL

-----MOTTLES----- PED -----STONES----- STRUCT/ SUBS

SAMPLE	DEPTH	TEXTURE	COLOUR	COL	ABUN	CONT	COL	GLE	>2	>6	LITH	TOT	CONSIST	STR	POR	IMP	SPL	CALC
1	0-30	mc1	10YR53 00							0	0	0						
	30-45	hc1	10YR53 00							0	0	0					M	
	45-60	hc1	10YR53 00	000C00	00	M		Y	0	0	0	0					M	
	60-100	hc1	25Y 73 00	000C00	00	V		Y	0	0	0	0					M	
2	0-30	mc1	10YR53 00							0	0	HR	2					
	30-80	hc1	10YR53 00	000C00	00	C		Y	0	0	0	0					M	
	80-100	c	25Y 53 00	000C00	00	C	00MN00	00	Y	0	0	0					M	
3	0-25	mc1	25Y 52 00	000C00	00	M		Y	0	0	0	0						
	25-40	mc1	10YR62 00	000C00	00	M		Y	0	0	0	0					M	
	40-78	sc1	10YR62 00	000C00	00	V		Y	0	0	0	0					M	
	78-95	c	10YR62 00	000C00	00	V		Y	0	0	0	0			P	Y		Y

SAMPLE NO	GRID REF	ASPECT USE	--WETNESS--		-WHEAT-		-POTS-		M REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
			GRDNT	GLEYSPL	CLASS	GRADE	AP	MB	AP	MB					
1	TQ32202410	PGR W	09	000	1	1	166	63	116	21	1		SL	38	MN 45
2	TQ32202400	PGR W	03	075 075	1	1	127	24	105	10	2		DR	2	MN CONCS
3	TQ32102400	PGR NW	05	070	2	2	116	13	118	23	2		WE	2	POSS WC2

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED COL	----STONES-----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLEY	>2	>6		LITH	TOT	STR	POR	IMP	SPL
1	0-30	mc1	10YR43 00					0	0	0							
	30-55	hc1	10YR54 00					0	0	HR	8		M				
	55-120	fs1	10YR66 00	10YR56	58	C		0	0	FSST	10		M				
2	0-28	mc1	10YR43 00					0	0	0							
	28-35	hc1	10YR54 00	10YR66	00	F		0	0	HR	2		M				
	35-75	c	10YR66 54	75YR56	58	M	10YR54 00	0	0	HR	5		P				
	75-120	hc1	10YR74 66	75YR56	58	C		Y	0	0	HR	5		P			Y
3	0-28	mc1	10YR43 00					0	0	0							
	28-70	hc1	10YR54 00	000C00	00	C	00MN00 00	0	0	0			M				
	70-80	mc1	25Y 64 00	000C00	00	C	00MN00 00	Y	0	0	0		M				

SAMPLE NO	GRID REF	USE	ASPECT		--WETNESS--		-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRDNT	GLEYSPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT		
1	TQ305 2495	PGR	025	065	3	3B	000	0	000	0					WE	3B	SPL 55
2	TQ30352510	PGR	040	060	3	3B	107	7	114	22	2				WE	3B	SPL

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED	----STONES----			STRUCT/	SUBS						
				COL	ABUN	CONT	COL	GLE	>2	>6	LITH	TOT	CONSIST	STR	POR	IMP	SPL	CALC
1	0-25	hc1	10YR42 00							0	0	0						
	25-50	c	25Y 72 63 75YR56 58 M				00MN00	00	Y	0	0	0						M
	50-95	c	25Y 72 00 75YR56 58 M				00MN00	00	Y	0	0	0						P Y
2	0-25	hc1	10YR43 00							0	0	0						
	25-40	hc1	10YR54 00 000C00 00 C							0	0	0						M
	40-60	c	25Y 63 00 000C00 00 M						Y	0	0	0						M
	60-80	c	25Y 63 00 000C00 00 M						Y	0	0	0						P Y Y

SAMPLE NO	GRID	REF	ASPECT USE	GRDNT	--WETNESS--			-WHEAT-		-POTS-		M REL DRT	EROSN FLOOD	FROST EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
					SPL	CLASS	GRADE	AP	MB	AP	MB							
1	TQ306	256	PGR	000	2	3A	000	0	000	0						WE	3A	NO SPL

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED COL	----STONES-----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	POR	IMP	SPL
1	0-35	mc1	25Y 52 00	75YR56	00	C		Y	0	0	0						
	35-60	mc1	25Y 72 00	75YR56	58	M		Y	0	0	0						M
	60-75	mc1	25Y 73 00	75YR56	00	M		Y	0	0	0						M

SAMPLE NO	GRID REF	ASPECT USE	--WETNESS--		-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS	
			GRDNT	GLEYSPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST		LIMIT
1	TQ34882410	PGR	035		2	2	100	-5	116	19	3A			WE	2	IMPNO SPL
2	TQ34902415	PGR	000		1	1	136	31	118	21	1				1	

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED COL	----STONES----			STRUCT/ CONSIST	SUBS						
				COL	ABUN	CONT		GLEY	>2	>6		LITH	TOT	STR	POR	IMP	SPL	CALC
1	0-25	mc1	10YR43 00					0	0	HR	2							
	25-35	mc1	10YR54 00					0	0	HR	2						M	
	35-45	hc1	25Y 63 00	000C00	00	M		Y	0	0		0						M
	45-60	c	25Y 73 00	000C00	00	M		Y	0	0		0						M
	60-70	c	10YR71 00	000C00	00	M		Y	0	0		0						M
2	0-30	mc1	10YR43 00					0	0		0							
	30-50	mc1	10YR44 00					0	0		0						M	
	50-80	hc1	10YR54 00				00MN00	00			0						M	
	80-100	hc1	10YR54 00	000C00	00	C	00MN00	00			0						M	

SAMPLE NO	GRID REF	ASPECT USE	--WETNESS--				-WHEAT-		-POTS-		M REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC COMMENTS
			GRDNT	GLEYS	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT				
1	TQ35702410	PGR		000	035	4	3B	084	-22	087	-11	3B			WE	3B
1P	TQ35502410	PGR NE	02	055		1	1	126	21	117	20	2			DR	2
2	TQ35602400	PGR NE	02	030		1	1	086	-20	086	-12	3A			DR	3A IMP X 2
3	TQ35502400	PGR E	04	028		1	1	086	-20	086	-12	3B			DR	3A IMP Q
4	TQ35402400	PGR E		000		1	1	101	-5	110	12	3A			DR	2 WEATHCOL
5	TQ35302400	PGR W	03	040		1	1	102	-4	118	20	3A			DR	2 IMP Q
6	TQ35202400	PGR W		000	050	3	3A	099	-7	111	13	3A			WE	3A
7	TQ35102400	PGR W		028		2	2	108	2	118	20	3A			WE	2 NO SPL
8	TQ35042396	PGR W		000	025	4	3B	081	-25	084	-14	3B			WE	3B
9	TQ35002400	PGR SE	03	000		1	1	136	30	118	20	1				1
10	TQ35202410	PGR NE	05	000		2	3A	089	-17	093	-5	3A			WE	3A IMPNOSPL
11	TQ35702430	PGR NW		030		2	2	110	4	118	20	3A			WE	2 NO SPL
12	TQ35702420	PGR NW		025		2	3A	119	13	114	16	2			WE	3A NO SPL
13	TQ35602420	PGR HE	05	030		2	2	114	8	118	20	2			WE	2 NO SPL
14	TQ35602410	PGR HE		030		2	2	098	-8	110	12	3A			WE	2 IMPNOSPL
15	TQ35402410	PGR HE		040		1	1	077	-29	077	-21	3B			DR	3A IMP X 2
16	TQ35302410	PGR NW	05	000		1	1	064	-42	064	-34	3B			DR	3A IMP X 2
17	TQ35302420	PGR NW	05	000		1	1	137	31	119	21	1				1
18	TQ35402420	PGR NW	05	038		2	2	095	-11	103	5	3A			WE	2 IMPNOSPL
20	TQ35602430	PGR SW	02	060		1	1	138	33	120	23	1				1
21	TQ35502430	PGR W	02	000		2	2	116	11	118	21	2			WE	2 IMP 80
22	TQ35402430	PGR W		025	035	4	3B	000	0	000	0				WE	3B SPL
23	TQ35302430	PGR		000	060	3	3A	135	30	114	17	1			WE	3A
24	TQ35402440	PGR W	03	030		2	2	159	54	121	24	1			WE	2 GRDWATER
25	TQ35502440	PGR	00	000		1	1	159	54	119	22	1				1
26	TQ35502450	PGR N	02	038		2	2	156	51	118	21	1			WE	2
27	TQ35702400	PGR NW	02	065	065	2	2	139	34	115	18	1			WE	2 MN
27P	TQ35702400	PGR N	02	025		2	2	155	50	117	20	1			WE	2 NO SPL
28	TQ35802400	PGR E	07	000		2	2	167	62	118	21	1			WE	2
30	TQ35702390	PGR W	07	030	076	2	2	143	38	118	21	1			WE	2 WC3-BDR
31	TQ35802390	PGR NE	02	030		2	2	104	-1	113	16	3A			WE	2
32	TQ35402380	PGR NW	02	000		1	1	091	-15	094	-4	3A			DR	2 IMP Q
35	TQ35702380	PGR W	04	025	066	3	3A	136	31	113	16	1			WE	3A
36	TQ35302370	PGR NW		000		1	1	097	-9	099	1	3A			DR	2 IMP Q
37	TQ35402370	PGR E	03	045		2	2	000	0	000	0				WE	2
39	TQ35602370	PGR NW	03	028	055	3	3A	128	23	105	8	2			WE	3A SPL 55
40	TQ35702370	PGR NW	03	075	075	2	2	143	38	118	21	1			WE	2 SPL 75
41	TQ35502360	PGR	02	000		2	2	156	51	118	21	1			WE	2

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED COL	----STONES----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	POR	IMP	SPL
1	0-25	hc1	25Y 52 00	000C00	00	M		Y	0	0	0						
	25-35	c	10YR61	00	000C00	00	M	Y	0	0	0		M				
	35-55	c	10YR61	00	000C00	00	M	Y	0	0	0		P	Y		Y	
1P	0-25	mc1	10YR53	00					0	0	0						
	25-55	hc1	10YR66	00	25Y 81	00	C	00MN00	00	0	0	0	MDCSAB	F	M	Y	
	55-100	c	25Y 63	00	75YR56	00	M	25Y 63	00	Y	0	0	0	SDCSAB	F	M	Y
2	0-30	mc1	10YR43	00					0	0	0						
	30-50	hc1	10YR52	00	000C00	00	M	Y	0	0	0		M				
3	0-28	mc1	10YR53	00					0	0	0						
	28-50	hc1	25Y 73	00	000C00	00	M	Y	0	0	0		M				
4	0-30	hc1	10YR43	00					0	0	0						
	30-65	mc1	10YR66	00					0	0	0		M				
5	0-28	mc1	10YR42	00					0	0	0						
	28-40	hc1	25Y 74	00					0	0	0		M				
	40-70	c	25Y 62	00	000C00	00	M	Y	0	0	0		M				
6	0-25	mc1	10YR42	00	000C00	00	C		Y	0	0	0					
	25-38	hc1	10YR53	00	000C00	00	C		Y	0	0	0		M			
	38-50	c	25Y 72	00	000C00	00	M		Y	0	0	0		M			
	50-70	c	25Y 72	00	000C00	00	M		Y	0	0	0		P	Y		Y
7	0-28	mc1	10YR43	00	000C00	00	F			0	0	0					
	28-40	hc1	10YR53	00	000C00	00	M		Y	0	0	0		M			
	40-72	hc1	25Y 74	00	000C00	00	V		Y	0	0	0		M			
8	0-25	mc1	10YR52	00	000C00	00	M		Y	0	0	0					
	25-55	c	10YR62	00	000C00	00	V		Y	0	0	0		P	Y		Y
9	0-30	mc1	10YR53	00						0	0	0					
	30-65	hc1	10YR43	00						0	0	0		M			
	65-100	hc1	10YR54	00	000C00	00	C			0	0	0		M			
10	0-25	hc1	10YR53	00	000C00	00	C		Y	0	0	0					
	25-55	c	25Y 62	00	000C00	00	M		Y	0	0	0		M			
11	0-30	mc1	10YR43	00						0	0	0					
	30-50	hc1	25Y 63	00	000C00	00	C		Y	0	0	0		M			
	50-80	c	25Y 64	00	000C00	00	M		Y	0	0	0		M			
12	0-25	hc1	10YR42	00	000C00	00	F			0	0	0					
	25-35	hc1	10YR42	00	000C00	00	C		Y	0	0	0		M			
	35-85	sc1	10YR61	00	000C00	00	M		Y	0	0	0		M			

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED COL	----STONES----				STRUCT/ CONSIST	SUBS		
				COL	ABUN	CONT		GLE	>2	>6	LITH		TOT	STR	POR
13	0-30	hc1	10YR42 00 000C00 00 F						0	0	0				
	30-45	hc1	10YR53 00 000C00 00 C					Y	0	0	0		M		
	45-85	c	25Y 72 00 000C00 00 M					Y	0	0	0		M		
14	0-30	mc1	10YR43 00						0	0	0				
	30-50	hc1	25Y 63 00 000C00 00 C					Y	0	0	0		M		
	50-65	c	25Y 63 00 000C00 00 M					Y	0	0	0		M		
15	0-30	mc1	10YR43 00						0	0	HR 2				
	30-40	hc1	10YR53 00						0	0	HR 2		M		
	40-45	hc1	25Y 63 00 000C00 00 C					Y	0	0	HR 2		M		
16	0-20	mc1	10YR43 00						0	0	HR 2				
	20-38	hc1	10YR54 00						0	0	HR 2		M		
17	0-35	mc1	10YR43 00						0	0	0				
	35-50	mc1	10YR43 00						0	0	0		M		
	50-60	hc1	75YR56 00						0	0	0		M		
	60-100	mc1	10YR54 00						0	0	0		M		
18	0-35	mc1	10YR42 00						0	0	0				
	35-38	hc1	25Y 66 00 000C00 00 C						0	0	0		M		
	38-60	c	25Y 73 00 000C00 00 M					Y	0	0	0		M		
20	0-28	mzc1	10YR43 00						0	0	0				
	28-60	mc1	10YR54 00				00MN00 00		0	0	0		M		
	60-100	mc1	25Y 73 00 000C00 00 M					Y	0	0	0		M		
21	0-30	mc1	10YR53 00 75YR56 00 C					Y	0	0	0				
	30-65	hc1	25Y 73 00 75YR56 58 C					Y	0	0	0		M		
	65-80	mc1	25Y 72 00 75YR56 58 M					Y	0	0	0		M		
22	0-25	hc1	10YR53 00						0	0	0				
	25-55	c	05Y 72 00 75YR56 00 C					Y	0	0	0		P		Y
	55-120	hc1	05Y 72 00 75YR56 00 C					Y	0	0	0		M		Y
23	0-25	mc1	10YR53 00 75YR56 00 C					Y	0	0	0				
	25-35	hc1	10YR53 00 75YR56 00 M					Y	0	0	0		M		
	35-60	c	25Y 63 00 75YR56 58 M					Y	0	0	0		M		
	60-120	c	05Y 71 00 75YR56 00 M				00MN00 00	Y	0	0	0		P		Y
24	0-30	mzc1	10YR53 00						0	0	0				
	30-45	mc1	25Y 73 00 75YR56 58 C					Y	0	0	0		M		
	45-75	hc1	25Y 72 00 75YR56 58 M					Y	0	0	0		M		
	75-120	sc1	05Y 71 00 75YR56 00 M				00MN00 00	Y	0	0	0		M		
25	0-30	mc1	10YR43-00						0	0	0				
	30-75	hc1	10YR54-00 10YR56- C						0	0	0		M		
	75-120	lfs	10YR81-00 10YR56- C					Y	0	0	HR 5		G		

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED COL	----STONES----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	POR	IMP	SPL
26	0-28	mc1	10YR53 00						0	0	0						
	28-38	hc1	10YR54 66 10YR56 00 F						0	0	0				M		
	38-120	hc1	25Y 63 00 10YR56 58 C					Y	0	0	0				M		
27	0-25	mc1	10YR43 00						0	0	0						
	25-65	hc1	10YR54 64 10YR56 00 C						0	0	0				M		
	65-120	hc1	25Y 53 00 10YR56 58 C					Y	0	0	0				P		Y
27P	0-25	mc1	10YR43 00						0	0	0						
	25-50	hc1	10YR53 00 000C00 00 C				00MN00	00	Y	0	0	0	MCSAB	FM	M	Y	
	50-120	hc1	25Y 72 00 75YR56 58 V					Y	0	0	0	MCSAB	FM	M	Y		
28	0-30	mzc1	10YR53-00						0	0	0						
	30-45	mc1	10YR54-00 10YR56- F						0	0	0				M		
	45-120	sc1	10YR76-66 75YR56- C						0	0	0				M		
30	0-30	mc1	10YR53 00						0	0	0						
	30-76	hc1	10YR64 54 10YR56 00 C				00MN00	00	Y	0	0	0				M	
	76-120	c	25Y 82 72 10YR56 00 C					Y	0	0	0				P		Y
31	0-30	mc1	10YR53 00						0	0	0						
	30-48	hc1	10YR53 00 10YR56 00 C					Y	0	0	0				M		
	48-70	sc1	75YR58 56					Y	0	0	MSST 10				M		
32	0-30	mc1	10YR43 00						0	0	0						
	30-55	mc1	10YR54 00						0	0	0				M		
35	0-25	mc1	10YR53 00						0	0	0						
	25 66	hc1	10YR64 54 10YR56 00 C				00MN00	00	Y	0	0	HR	5		M		
	66 120	c	25Y 82 72 75YR56 00 C					Y	0	0	0				P		Y
36	0-28	hc1	10YR43 00						0	0	0						
	28-55	fs1	10YR53 66						0	0	0				M		
37	0-28	mc1	10YR53 00						0	0	0						
	28-45	hc1	25Y 73 66 75YR56 58 C						0	0	0				M		
	45-65	hc1	25Y 72 00 75YR58 56 C					Y	0	0	0				M		
	65-120	hc1	10YR63 00 10YR56 58 C					Y	0	0	0				M		
39	0-28	mc1	10YR43 00						0	0	0						
	28-55	c	25Y 63 00 10YR56 00 C					Y	0	0	0				P		
	55-120	c	25Y 82 72 10YR56 00 M					Y	0	0	0				P		Y
40	0-30	mc1	10YR43 00						0	0	0						
	30-75	hc1	10YR54 66 10YR56 00 C				00MN00	00		0	0	0				M	
	75-120	c	25Y 82 72 10YR56 00 C					Y	0	0	0				P		Y
41	0-28	mc1	10YR53 00 10YR56 00 C					Y	0	0	0						
	28-55	hc1	10YR53 00 10YR56 58 C					Y	0	0	0				M		
	55-120	hc1	25Y 82 00 75YR56 58 C					Y	0	0	0				M		

SOIL PIT DESCRIPTION

Site Name HAYWARDS H TH LP SITE 12 Pit Number 1P

Grid Reference TQ35502410 Average Annual Rainfall 821 mm
 Accumulated Temperature 1477 degree days
 Field Capacity Level 174 days
 Land Use Permanent Grass
 Slope and Aspect 02 degrees NE

HORIZON	TEXTURE	COLOUR	STONES >2	TOT STONE	MOTTLES	STRUCTURE
0- 25	MCL	10YR53 00	0	0		
25- 55	HCL	10YR66 00	0	0	C	MDCSAB
55-100	C	25Y 63 00	0	0	M	SDCSAB

Wetness Grade 1 Wetness Class I
 Gleying 055 cm
 SPL No SPL

Drought Grade 2 APW 126mm MBW 21 mm
 APP 117mm MBP 20 mm

FINAL ALC GRADE 2
 MAIN LIMITATION Droughtiness

SOIL PIT DESCRIPTION

Site Name HAYWARDS H TH LP SITE 12 Pit Number 27P

Grid Reference TQ35702400 Average Annual Rainfall 821 mm
 Accumulated Temperature 1477 degree days
 Field Capacity Level 174 days
 Land Use Permanent Grass
 Slope and Aspect 02 degrees N

HORIZON	TEXTURE	COLOUR	STONES >2	TOT STONE	MOTTLES	STRUCTURE
0- 25	MCL	10YR43 00	0	0		
25- 50	HCL	10YR53 00	0	0	C	MCSAB
50-120	HCL	25Y 72 00	0	0	V	MCSAB

Wetness Grade 2 Wetness Class II
 Gleying 025 cm
 SPL No SPL

Drought Grade 1 APW 155mm MBW 50 mm
 APP 117mm MBP 20 mm

FINAL ALC GRADE 2
 MAIN LIMITATION Wetness

SAMPLE NO	GRID REF	ASPECT USE	--WETNESS--		-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS	
			GRDNT	GLEYSPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST		LIMIT
1	TQ33602190	PGR	000	045	4	3B	150	41	112	9	2			WE	3B	BDR WC34
2	TQ33602180	PGR	000	055	3	3A	137	28	112	9	2			WE	3A	
3	TQ33502180	PGR	000		2	2	136	27	118	15	2			WE	2	NO SPL
4	TQ33402180	PGR	000		1	1	101	-8	110	7	3A			DR	2	IMP 65CM
5	TQ33522188	PGR	000		3	3A	104	-5	113	10	3A			WE	3A	

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	10YR42 00	10YR56	00	C		Y	0	0	0						
	30-45	hc1	10YR53 00	10YR56	00	C		Y	0	0	0		M				
	45-65	c	25Y 63 00	10YR56	00	C		Y	0	0	0		P			Y	
	65-120	sc1	25Y 63 00	10YR56	58	C		Y	0	0	0		M				Y
2	0-30	mc1	10YR53 00	10YR56	00	C		Y	0	0	0						
	30-55	hc1	10YR53 54	10YR56	00	C		Y	0	0	0		M				
	55-120	hc1	25Y 64 00	10YR56	58	C		Y	0	0	0		P				Y
3	0-30	mc1	10YR42 00	000C00	00	C		Y	0	0	0						
	30-60	mc1	25Y 63 00	000C00	00	M		Y	0	0	0		M				
	60-100	mc1	25Y 52 00	000C00	00	M		Y	0	0	0		M				
4	0-35	mc1	10YR42 00						0	0	0						
	35-65	mc1	10YR54 00						0	0	HR	2		M			
5	0-28	hc1	10YR53 00	000C00	00	C		Y	0	0	0						
	28-45	hc1	25Y 63 00	000C00	00	M		Y	0	0	0		M				
	45-55	c	25Y 63 00	000C00	00	M		Y	0	0	0		M				
	55-75	c	25Y 52 00	000C00	00	V		Y	0	0	0		P	Y			

SAMPLE NO	GRID REF	USE	ASPECT		--WETNESS--		-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRDNT	GLEYS	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT	
1	TQ304 243	PGR SE	02	000	1	1	121	16	113	15	2					DR 2	FSST 70
1P	TQ302 2415	PGR S	02	000	1	1	174	69	114	16	1					1	SEE PIT2
2	TQ305 243	PGR SE	02	000	1	1	130	25	112	14	2					DR 2	FSST 80
2P	TQ303 2415	PGR S	02	000	1	1	133	28	084	-14	3A					DR 2	
3	TQ303 242	PGR SW	02	000	1	1	132	27	113	15	2					DR 2	FSST 80
3P	TQ30052405	PGR S	02	026 042	4	3B	000	0	000	0						WE 3B	SPL 42
4	TQ305 242	PGR S	02	000	1	1	132	27	114	16	2					DR 2	FSST 80
5	TQ306 242	PGR SE	05	068 068	2	2	136	31	111	13	1					WE 2	SPL 68
6	TQ305 241	PGR S	03	000 000	2	2	168	63	116	18	1					WE 2	NO SPL
7	TQ305 240	PGR S	03	000	1	1	056	-49	056	-42	3B					DR 3B	IMP 32
8	TQ304 240	PGR S	03	000	1	1	155	50	117	19	1					DR 1	DEEP
9	TQ302 242	PGR S		000	1	1	151	46	117	19	1					1	NO GLEY
11	TQ300 242	PGR S		000	1	1	156	51	118	20	1					1	
12	TQ299 241	PGR S		045 050	3	3B	100	-5	112	14	3A					WE 3B	SPL
13	TQ300 241	PGR S		022 040	4	3B	088	-17	094	-4	3A					WE 3B	SPL
14	TQ301 241	PGR S	03	000 045	3	3A	098	-7	110	12	3A					WE 3A	SPL 47CM
15	TQ302 241	PGR S	02	045	1	1	157	52	115	17	1					1	
16	TQ301 240	PGR S	02	025 040	4	3B	089	-16	095	-3	3A					WE 3B	SPL
17	TQ302 240	PGR S	02	000	1	1	157	52	118	20	1					1	
18	TQ303 245	PGR S	02	035 065	3	3A	111	6	116	18	2					WE 3A	SPL
19	TQ303 246	PGR SW	02	026 026	4	3B	085	-20	091	-7	3A					WE 3B	SPL 26

-----MOTTLES----- PED -----STONES----- STRUCT/ SUBS

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES			PED COL	STONES			STRUCT/ CONSIST	SUBS			
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	POR
1	0-30	mc1	10YR42 00					0	0	FSST	2				
	30-58	mc1	10YR43 00					0	0	FSST	5			M	
	58-70	lfs	10YR32 66					0	0	FSST	15			M	
	70-120	fsst	10YR56 66					0	0		0			P	
1P	0-30	mc1	10YR43 00					0	0	FSST	2				
	30-47	mc1	10YR43 44					0	0	FSST	4	MCSAB	FR	M	
	47-120	lfs	75YR43 00					0	0	FSST	2	WCSAB	VF	M	
2	0-26	mc1	10YR42 00					0	0	FSST	2				
	26-55	hc1	10YR43 44					0	0	FSST	5			M	
	55-60	lfs	10YR44 00					0	0		0			M	
	60-80	fs	10YR32 44					0	0	FSST	5			M	
	80-120	fsst	10YR32 00					0	0		0			P	
2P	0-30	mc1	10YR43 00					0	0	FSST	2				
	30-40	mc1	10YR44 00					0	0	FSST	4			M	
	40-70	fsst	75YR44 00					0	0		0			M	
	70-110	lfs	75YR44 00					0	0	FSST	5			M	
	110-120	fsst	75YR44 00					0	0		0			M	
3	0-30	mc1	10YR42 00					0	0	FSST	2				
	30-45	mc1	10YR43 00					0	0	FSST	5			M	
	45-65	lfs	10YR43 54					0	0	FSST	2			M	
	65-80	fs	10YR43 44					0	0	FSST	5			M	
	80-120	fsst	10YR32 66					0	0		0			P	
3P	0-26	mc1	10YR42 00	000M00	00	F		0	0		0				
	26-42	hc1	25Y 63 53	75YR68	00	C		Y	0	0	0	WDMSAB	F	M	Y
	42-60	c	05Y 62 00	75YR58	68	M		Y	0	0	0	WDCP	VF	P	Y
4	0-30	mc1	10YR42 43					0	0		0				
	30-55	mc1	10YR43 44					0	0	FSST	5			M	
	55-80	lfs	10YR54 56					0	0	FSST	10			M	
	80-120	fsst	10YR56 00					0	0		0			P	
5	0-30	mc1	10YR43 00					0	0	FSST	2				
	30-50	mc1	10YR43 44					0	0	FSST	10			M	
	50-68	sc1	10YR54 56					0	0	FSST	10			M	
	68-120	c	05Y 73 00	75YR56	58	C	00MN00	00	Y	0	0	0		P	Y
6	0-30	mc1	10YR42 53	75YR56	00	C		Y	0	0	0				
	30-45	mc1	10YR53 00					Y	0	0	HR	2		M	
	45-75	mc1	10YR53 00	75YR56	00	C	00MN00	00	Y	0	0	FSST	5	M	
	75-120	lfs	10YR54 56					Y	0	0	0			M	
7	0-30	mc1	10YR53 54					0	0	HR	2				
	30-32	fs1	10YR53 00					0	0	FSST	20			M	

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT	COL	GLE	>2	>6	LITH		TOT	STR	POR	IMP	SPL	CALC
8	0-30	mc1	10YR42 53						0	0	0							
	30-85	mc1	10YR53 54						0	0	HR 2				M			
	85-90	fs1	10YR44 54						0	0	FSST 20				M			
	90-120	1fs	10YR44 54						0	0	FSST 30				M			
9	0-25	mc1	10YR42 00						0	0	0							
	25-65	mc1	10YR43 00						0	0	0				M			
	65-75	c	10YR53 00				00MN00 00		0	0	0				M			
	75-110	sc1	75YR43 00				00MN00 00		0	0	0				M			
	110-120	c	75YR43 00				00MN00 00		0	0	0				M			
11	0-30	mc1	10YR42 00						0	0	0							
	30-120	mc1	10YR43 00						0	0	0				M			
12	0-28	hc1	10YR42 00						0	0	0							
	28-45	hc1	10YR53 00						0	0	0				M			
	45-50	c	25Y 63 00 000C00 00 M					Y	0	0	0				M			
	50-70	c	25Y 63 00 000C00 00 M					Y	0	0	0				P	Y		Y
13	0-22	mc1	10YR42 00						0	0	0							
	22-35	hc1	25Y 63 00 000C00 00 M				00MN00 00	Y	0	0	0				M			
	35-40	c	25Y 63 00 000C00 00 M				00MN00 00	Y	0	0	0				M			
	40-60	c	25Y 63 00 000C00 00 M					Y	0	0	0				P	Y		Y
14	0-25	mc1	10YR42 00 000C00 00 C					Y	0	0	0							
	25-45	hc1	25Y 64 00 000C00 00 M				00MN00 00	Y	0	0	0				M			
	45-70	c	25Y 64 00 000C00 00 M				00MN00 00	Y	0	0	0				P	Y		Y
15	0-30	mc1	10YR42 00						0	0	HR 1							
	30-45	mc1	10YR42 00 000C00 00 F						0	0	HR 1				M			
	45-75	ms1	10YR52 00 000C00 00 M					Y	0	0	0				M			
	75-120	hc1	25Y 64 00 000C00 00 M				00MN00 00	Y	0	0	0				M			
16	0-25	mc1	10YR52 00						0	0	0							
	25-40	c	25Y 63 00 000C00 00 M					Y	0	0	0				M			
	40-60	c	25Y 63 00 000C00 00 M					Y	0	0	0				P	Y		Y
17	0-30	mc1	10YR42 00						0	0	0							
	30-70	mc1	10YR43 00						0	0	0				M			
	70-85	mc1	75YR44 00						0	0	0				M			
	85-120	ms1	75YR44 00						0	0	FSST 10				M			
18	0-25	mc1	10YR42 00						0	0	0							
	25-35	hc1	10YR52 00						0	0	0				M			
	35-65	c	25Y 63 00 000C00 00 M					Y	0	0	0				M			
	65-85	c	10YR62 00 000C00 00 M					Y	0	0	0				P	Y		Y
19	0-26	mc1	10YR53 00						0	0	0							
	26-60	c	05Y 71 72 75YR58 00 C					Y	0	0	0				P			Y

SOIL PIT DESCRIPTION

Site Name H HEATH LP SITE 16 Pit Number 1P

Grid Reference TQ302 2415 Average Annual Rainfall 812 mm
 Accumulated Temperature 1462 degree days
 Field Capacity Level 173 days
 Land Use Permanent Grass
 Slope and Aspect 02 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT STONE	MOTTLES	STRUCTURE
0- 30	MCL	10YR43 00	0	2		
30- 47	MCL	10YR43 44	0	4		MCSAB
47-120	LFS	75YR43 00	0	2		WCSAB

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

Drought Grade 1 APW 174mm MBW 69 mm
 APP 114mm MBP 16 mm

FINAL ALC GRADE 1
 MAIN LIMITATION

SOIL PIT DESCRIPTION

Site Name H HEATH LP SITE 16 Pit Number 2P

Grid Reference TQ303 2415 Average Annual Rainfall 812 mm
 Accumulated Temperature 1462 degree days
 Field Capacity Level 173 days
 Land Use Permanent Grass
 Slope and Aspect 02 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT STONE	MOTTLES	STRUCTURE
0 30	MCL	10YR43 00	0	2		
30 40	MCL	10YR44 00	0	4		
40- 70	FSST	75YR44 00	0	0		
70-110	LFS	75YR44 00	0	5		
110-120	FSST	75YR44 00	0	0		

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

Drought Grade 3A APW 133mm MBW 28 mm
 APP 084mm MBP -14 mm

FINAL ALC GRADE 2
 MAIN LIMITATION Droughtiness

SOIL PIT DESCRIPTION

Site Name H HEATH LP SITE 16 Pit Number 2P

Grid Reference TQ303 2415 Average Annual Rainfall 812 mm
 Accumulated Temperature 1462 degree days
 Field Capacity Level 173 days
 Land Use Permanent Grass
 Slope and Aspect 02 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT STONE	MOTTLES	STRUCTURE
0- 30	MCL	10YR43 00	0	2		
30- 40	MCL	10YR44 00	0	4		
40- 70	FSST	75YR44 00	0	0		
70-110	LFS	75YR44 00	0	5		
110-120	FSST	75YR44 00	0	0		

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

Drought Grade 3A APW 133mm MBW 28 mm
 APP 084mm MBP -14 mm

FINAL ALC GRADE 2
 MAIN LIMITATION Droughtiness

SOIL PIT DESCRIPTION

Site Name H HEATH LP SITE 16 Pit Number 3P
 Grid Reference TQ30052405 Average Annual Rainfall 812 mm
 Accumulated Temperature 1462 degree days
 Field Capacity Level 173 days
 Land Use Permanent Grass
 Slope and Aspect 02 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT STONE	MOTTLES	STRUCTURE
0- 26	MCL	10YR4/2 00	0	0	F	
26- 42	HCL	2.5Y 6/3 53	0	0	C	WDMSAB
42- 60	C	0.5Y 6/2 00	0	0	M	WDCP

Wetness Grade 3B Wetness Class IV
 Gleying 026 cm
 SPL 042 cm

Drought Grade APW 000mm MBW 0 mm
 APP 000mm MBP 0 mm

FINAL ALC GRADE 3B
 MAIN LIMITATION Wetness

program ALC012

LIST OF BORINGS HEADERS 06/25/93 H HEATH LP SITE 17

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SAMPLE NO	GRID REF	ASPECT USE	--WETNESS--		-WHEAT-		-POTS-		M REL		EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
			GRDNT	GLEY SPL	CLASS	GRADE	AP	MB	AP	MB					
1	TQ309 256	PGR		000	2	3A	153	55	117	28	1			WE 3A	NO SPL
2	TQ308 255	PGR E	02	026 045	4	3B	098	0	110	21	3A			WE 3B	SPL 45

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED	----STONES----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT	COL	GLEY	>2	>6		LITH	TOT	STR	POR	IMP	SPL
1	0-25	mc1	10YR42 00			C		Y	0	0	0						
	25-70	mc1	25Y 63 00			M		Y	0	0	0				M		
	70-80	c	25Y 63 00	000C00	00	M		Y	0	0	0				M		
	80-120	sc1	25Y 63 00	000C00	00	M		Y	0	0	0				M		
2	0-26	mc1	10YR42 00	75YR56	00	F			0	0	0						
	26-45	c	10YR53 00	75YR56	5B	M		Y	0	0	0				M		
	45-70	c	25Y 53 00	75YR56	00	M	00MN00	00	Y	0	0	0			P		Y

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	
1	TQ37102310	LIN S	03	035		2	2	122	16	119	20	2		WE	2
2	TQ37202310	LIN S	03	000	040	4	3B	166	60	111	12	1		WE	3B
3	TQ37402304	LIN S		038	038	4	3B	088	-18	091	-8	3A		WE	3B SPL
4	TQ37432295	LIN S	04	030	050	3	3B	099	-7	111	12	3A		WE	3B SPL
5	TQ37542308	LIN S	02	000	040	4	3B	000	0	000	0			WE	3B
6	TQ37102300	LIN S	05	030	030	4	3B	084	-22	087	-12	3B		WE	3B SPL
7	TQ37202300	LIN S	04	035	050	3	3B	105	-1	113	14	3A		WE	3B SPL
8	TQ37602300	LIN	02	000		2	3A	142	36	118	19	1		WE	3A

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED		----STONES----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT	COL	GLE	>2	>6	LITH		TOT	STR	POR	IMP	SPL	CALC
1	0-35	mc1	10YR43 00						0	0	0							
	35-85	hc1	25Y 63 00	75YR56 00	C		00MN00	00	Y	0	0	0	M					
2	0-40	c	25Y 63 00	75YR58 56	C			Y	0	0	0							
	40-55	c	25Y 63 00	75YR58 00	M			Y	0	0	0	P						Y
	55-65	hc1	25Y 63 00	75YR58 00	C			Y	0	0	0	M						Y
	65-120	lfs	25Y 73 72	75YR58 00	C			Y	0	0	0	G						Y
3	0-38	hc1	10YR53 00						0	0	0							
	38-55	c	25Y 63 00	000C00 00	M			Y	0	0	0	P	Y					Y
4	0-30	hc1	10YR42 00						0	0	0							
	30-40	hc1	25Y 63 00	000C00 00	C			Y	0	0	0	M						
	40-50	sc1	25Y 63 00	000C00 00	M			Y	0	0	0	M						
	50-70	c	05Y 62 00	000C00 00	V			Y	0	0	0	P	Y					Y
5	0-30	c	10YR53 00	10YR56 00	F			Y	0	0	0							
	30-80	c	25Y 72 00	75YR58 00	M			Y	0	0	0	P						Y
6	0-30	mc1	10YR42 00						0	0	0							
	30-55	c	10YR53 00	000C00 00	M			Y	0	0	0	P	Y					Y
7	0-35	hc1	10YR53 00						0	0	0							
	35-50	c	25Y 63 00	000C00 00	M			Y	0	0	0	M						
	50-75	c	25Y 63 00	000C00 00	M			Y	0	0	0	P	Y					Y
8	0-30	hc1	10YR53 00	10YR56 00	F			Y	0	0	0							
	30-40	hc1	25Y 64 00	75YR58 00	C			Y	0	0	0	M						
	40-120	c	25Y 72 00	75YR58 00	M			Y	0	0	0	M						

SAMPLE NO	GRID	REF	ASPECT		--WETNESS--				-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS	
			USE		GRDNT	GLEYS	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT		
1	TQ370	233	PGR	W	02	028	055	3	3A	108	5	113	17	2				WE	3A	SPL 55

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED	----STONES----			STRUCT/ CONSIST	SUBS							
				COL	ABUN	CONT		COL	GLE	>2		>6	LITH	TOT	STR	POR	IMP	SPL	CALC
1	0-28	mc1	10YR53 00							0	0	0							
	28-55	hc1	25Y 53 00	75YR58	00	C				Y	0	0	0					M	
	55-80	c	10YR71 00	75YR56	58	M				Y	0	0	0					P	Y

SAMPLE NO	GRID REF	USE	ASPECT		--WETNESS--		-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRDNT	GLEYS	SPL	CLASS	GRADE	AP	MB	AP	MB	ORT	FLOOD	EXP	DIST	LIMIT	
1	TQ35102470	PGR	NE	02	000	2	2	156	50	118	20	1				WE 2	
2	TQ35002460	PGR	NW	02	045 000	2	2	157	51	119	21	1				WE 2	MN WC2
3	TQ35102460	PGR	NE	02	030	2	2	156	50	118	20	1				WE 2	
4	TQ35202460	PGR			050	1	1	132	26	118	20	2				1	NO SPL
5	TQ35002450	PGR	W	03	000 050	3	3A	135	29	112	14	2				WE 3A	SPL 50

-----MOTTLES----- PED -----STONES----- STRUCT/ SUBS

SAMPLE	DEPTH	TEXTURE	COLOUR	COL	ABUN	CONT	COL	GLE	>2	>6	LITH	TOT	CONSIST	STR	POR	IMP	SPL	CALC
1	0-30	mc1	10YR53 00	10YR56	00	F		Y	0	0	0							
	30-120	hc1	25Y 63 73	75YR56	58	M	00M000	00	Y	0	0	0						M
2	0-34	mc1	10YR53 00							0	0	0						
	34-45	hc1	10YR54 00	10YR56	00	F				0	0	0						M
	45-66	hc1	25Y 64 00	75YR56	00	C	00M000	00	Y	0	0	0						M
	66-120	hc1	25Y 72 00	75YR58	00	C			Y	0	0	0						M
3	0-30	mc1	10YR53 00							0	0	0						
	30-40	mc1	10YR53 00	75YR56	00	C			Y	0	0	0						M
	40-120	hc1	25Y 72 71	75YR56	58	C			Y	0	0	0						M
4	0-30	mc1	10YR42 00							0	0	0						
	30-50	hc1	10YR54 00							0	0	0						M
	50-80	hc1	25Y 63 00	00C00	00	C			Y	0	0	0						M
	80-100	c	25Y 73 00	00C00	00	M			Y	0	0	0						M
5	0-28	mc1	10YR53 00	10YR56	00	C			Y	0	0	0						
	28-45	hc1	25Y 53 00	75YR56	58	C			Y	0	0	0						M
	45-50	c	25Y 72 00	75YR56	58	M			Y	0	0	0						M
	50-120	c	05Y 71 00	75YR56	58	M			Y	0	0	0						P

Y

APPENDIX IVB

HAYWARDS HEATH LOCAL PLAN DISTRICT COUNCIL SITES

SOIL PIT AND SOIL BORING DESCRIPTIONS

Contents	* Soil Abbreviations	Explanatory Note
	* Soil Pit Descriptions	
	* Database Printout	Boring Level Information
	* Database Printout	Horizon Level Information

SAMPLE NO	GRID REF	ASPECT		--WETNESS--				-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS
		USE	GRDNT	GLEY	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT		
1	TQ32422360	PGR	S	01	000	026	4	3B	132	28	109	12	2			WE	3B	SPL 26
2	TQ32402350	PGR	S	06	000		1	1	134	30	113	16	2			DR	2	NO SPL
3	TQ32502350	PGR	S	02	000	049	3	3A	000	0	000	0				WE	3A	SPL 49
5	TQ32502340	PGR	S	02	000	032	4	3B	087	-17	093	-4	3A			WE	3B	SPL 32
6	TQ32602340	PGR	S	02	025		2	2	111	7	121	24	2			WE	2	IMP 70
7	TQ32302330	PGR	S	04	025		2	3A	144	40	114	17	1			WE	3A	NO SPL
8	TQ32402332	PGR	S	05	000	050	3	3A	099	-5	111	14	3A			WE	3A	SPL 50
9	TQ32522330	PGR	S	03	000	055	3	3A	106	2	112	15	3A			WE	3A	SPL 55
10	TQ32632332	PGR	S	03	025	045	4	3B	098	-6	110	13	3A			WE	3B	SPL 45
11	TQ32302320	PGR	N	05	000	025	4	3B	000	0	000	0				WE	3B	SPL 25
12	TQ32402320	PGR	SW	02	000	060	3	3B	109	5	116	19	2			WE	3B	SPL 60
13	TQ32542319	PGR	S		000	040	4	3B	000	0	000	0				WE	3B	SPL 40
14	TQ32652320	PGR	S	01	000	040	4	3B	088	-16	094	-3	3A			WE	3B	C TS
15	TQ32342310	PGR	N	05	000	055	3	3B	107	3	113	16	3A			WE	3B	SPL 55

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED		----STONES----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT	COL	GLEY	>2	>6	LITH		TOT	STR	POR	IMP	SPL	CALC
1	0-26	mc1	10YR53 00 75YR56 00 C						Y	0	0	0						
	26-50	c	25Y 63 00 75YR56 58 M				00MN00	00	Y	0	0	0			P			Y
	50-68	hc1	25Y 72 73 75YR58 00 M						Y	0	0	0			M			Y
	68-120	c	25Y 72 00 75YR56 58 M				00MN00	00	Y	0	0	0			P			Y
2	0-25	mc1	10YR53 00 75YR56 00 F							0	0	0						
	25-48	hc1	10YR54 43							0	0	HR	3			M		
	48-88	c	10YR54 66 75YR58 00 C							0	0	HR	8			M		
	88-120	c	10YR54 66 75YR56 58 C							0	0	HR	15			M		
3	0-27	mc1	10YR53 00 75YR56 00 C						Y	0	0	0						
	27-49	hc1	10YR53 00 75YR58 00 M						Y	0	0	0			M			
	49-70	c	25Y 72 00 75YR58 00 M						Y	0	0	0			P			Y
5	0-25	mc1	10YR53 00 75YR56 00 C						Y	0	0	0						
	25-32	hc1	10YR53 00 75YR56 00 M						Y	0	0	0			M			
	32-60	c	25Y 72 00 75YR56 00 M						Y	0	0	0			P			Y
6	0-25	mc1	10YR53 00							0	0	0						
	25-30	mc1	10YR53 64 75YR58 00 C						Y	0	0	0			M			
	30-50	mc1	25Y 72 00 75YR58 00 M						Y	0	0	0			M			
	50-70	fs1	25Y 63 00 75YR58 00 C						Y	0	0	0			M			
7	0-25	hc1	10YR53 00							0	0	0						
	25-45	c	10YR53 64 75YR56 00 C						Y	0	0	0			M			
	45-65	sc1	10YR56 66							0	0	HR	5			M		
	65-80	fs1	10YR56 66							0	0	HR	10			M		
	80-120	c	10YR56 66 75YR56 00 C							0	0	HR	15			M		
8	0-25	mc1	10YR53 00 75YR56 00 C						Y	0	0	0						
	25-50	c	10YR54 66 75YR56 00 F							0	0	0			M			
	50-70	c	25Y 63 72 75YR58 00 M						Y	0	0	0			P			Y
9	0-25	mc1	10YR53 00 75YR56 00 C						Y	0	0	0						
	25-35	hc1	10YR53 64 75YR56 00 C						Y	0	0	0			M			
	35-55	c	10YR64 66 75YR58 00 C						Y	0	0	HR	2			M		
	55-80	c	25Y 72 00 75YR56 00 M				00MN00	00	Y	0	0	HR	2			P		Y
10	0-25	mc1	10YR53 00							0	0	0						
	25-45	hc1	25Y 63 64 75YR56 00 M				00MN00	00	Y	0	0	0			M			
	45-70	c	25Y 72 00 75YR56 00 M						Y	0	0	0			P			Y
11	0-25	mc1	10YR53 00 75YR56 00 C						Y	0	0	0						
	25-50	c	25Y 63 00 75YR56 00 M				00MN00	00	Y	0	0	0			P			Y
12	0-35	hc1	10YR53 54 75YR56 00 C						Y	0	0	0						
	35-60	c	10YR66 56 75YR56 00 M				00MN00	00		0	0	0			M			
	60-80	c	25Y 72 00 75YR56 58 M				00MN00	00	Y	0	0	0			P			Y

SAMPLE	DEPTH	TEXTURE	COLOUR	-----MOTTLES-----			PED COL	-----STONES-----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLEY	>2	>6		LITH	TOT	STR	POR	IMP	SPL
13	0-25	hc1	05Y 62 00	75YR56	00	M		Y	0	0	0						
	25-40	c	25Y 72 00	75YR56	00	M		Y	0	0	0		M				
	40-60	c	25Y 72 00	75YR56	58	M		Y	0	0	0		P			Y	
14	0-40	c	25Y 72 00	75YR56	00	M		Y	0	0	0						
	40-60	c	25Y 72 00	75YR56	58	M		Y	0	0	0		P			Y	
15	0-25	hc1	10YR53	00	75YR56	00	C		Y	0	0	0					
	25-55	c	10YR54	66	75YR58	00	C			0	0	0		M			
	55-80	c	25Y 72 00	75YR58	00	M		Y	0	0	0		P			Y	

SAMPLE NO	GRID REF	ASPECT USE	--WETNESS--				-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRDNT	GLEYS	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT	
1	TQ32122340	PGR		000	035	4	3B	000	0	000	0				WE	3B	SPL 35
2	TQ32022330	PGR S	02	000	035	4	3B	000	0	000	0				WE	3B	SPL 35
3	TQ32122330	PGR S	02	000		2	2	112	9	116	21	2			WE	2	IMP 75
4	TQ32222310	PGR S	02	000	035	4	3B	000	0	000	0				WE	3B	SPL 35

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----			PED COL	----STONES----			STRUCT/ CONSIST	SUBS					
				COL	ABUN	CONT		GLE	>2	>6		LITH	TOT	STR	POR	IMP	SPL
1	0-25	hc1	10YR53 00 75YR56 00	C				Y	0	0	0						
	25-35	c	25Y 63 00 75YR56 00	M			00MN00	00	Y	0	0		M				
	35-60	c	25Y 72 63 75YR58 00	M				Y	0	0	0		P			Y	
2	0-26	hc1	10YR53 00 75YR56 00	C				Y	0	0	0						
	26-35	c	25Y 63 00 75YR58 00	M				Y	0	0	0		M				
	35-60	c	25Y 72 63 75YR58 00	M				Y	0	0	0		P			Y	
3	0-25	mc1	10YR53 00 75YR56 00	C				Y	0	0	0						
	25-45	hc1	10YR53 54 75YR56 00	M				Y	0	0	0		M				
	45-60	mc1	25Y 73 74 75YR58 00	M				Y	0	0	0		M				
	60-70	sc1	25Y 73 74 75YR58 00	M				Y	0	0	0		M				
	70-75	fs1	25Y 73 74 75YR58 00	M				Y	0	0	0		M				
4	0-30	hc1	10YR53 00 75YR56 00	C				Y	0	0	0						
	30-35	c	10YR53 00 75YR56 00	M			00MN00	00	Y	0	0		M				
	35-60	c	25Y 63 00 75YR56 00	M			00MN00	00	Y	0	0		P			Y	

SAMPLE NO	GRID REF	USE	ASPECT		--WETNESS--				-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRDNT	GLEYS	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT			
1	TQ32482263	FAL S	02	066	085	1	1	138	32	117	18	1					WE	1	BDR TS
1P	TQ32432262	FAL S	02	026	026	4	3B	088	-18	096	-3	3A					WE	3B	
5	TQ32502240	FAL NW	02	045		1	2	172	66	120	21	1					WE	2	
6	TQ32302257	FAL N	03	075	075	2	2	136	30	116	17	1					WE	2	EXTRA AB

SAMPLE	DEPTH	TEXTURE	COLOUR	-----MOTTLES-----			PED	-----STONES-----			STRUCT/	SUBS							
				COL	ABUN	CONT		COL	GLE	>2		>6	LITH	TOT	CONSIST	STR	POR	IMP	SPL
1	0-28	mc1	10YR53 00						0	0	0								
	28-56	hc1	10YR54 00						0	0	0							M	
	56-66	c	10YR54 00				00MNO0 00		0	0	HR	2						M	
	66-85	c	25Y 63 00	75YR56	58	C			Y	0	0	HR	5						M
	85-120	c	25Y 73 00	75YR58	00	M			Y	0	0		0						P
1P	0-26	hc1	10YR53 00						0	0	0								
	26-64	c	25Y 63 73	75YR58	00	M	25Y 73 63	Y	0	0		0	MCAB	F	P	Y			Y
5	0-28	hc1	10YR43 00	75YR56	00	F			0	0	0								
	28-45	hc1	10YR44 54						0	0	0								M
	45-75	fs1	25Y 73 00	10YR56	00	M			Y	0	0	HR	5						M
	75-90	lfs	10YR66 00						Y	0	0	HR	5						M
	90-120	fs	25Y 72 00	10YR56	00	C			Y	0	0		0						M
6	0-35	mc1	10YR42 43						0	0	0								
	35-46	hc1	10YR44 00						0	0	HR	5							M
	46-75	c	10YR54 66	75YR58	00	C			0	0	HR	5							M
	75-120	c	25Y 72 00	75YR58	00	M			Y	0	0		0						P

SOIL PIT DESCRIPTION

Site Name H HEATH LP SITE 3 Pit Number 1P

Grid Reference TQ32432262 Average Annual Rainfall 801 mm
 Accumulated Temperature 1474 degree days
 Field Capacity Level 172 days
 Land Use Fallow
 Slope and Aspect 02 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT STONE	MOTTLES	STRUCTURE
0- 26	HCL	10YR53 00	0	0		
26- 64	C	25Y 63 73	0	0	M	M CAB

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

Drought Grade 3A APW 088mm MBW -18 mm
 APP 096mm MBP -3 mm

FINAL ALC GRADE 3B
 MAIN LIMITATION Wetness

SAMPLE NO	GRID REF	USE	ASPECT		--WETNESS--		-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS
			GRDNT	GLEYSPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT		
1	TQ33522270	PGR S	03	000	2	2	155	52	117	22	1				WE	2	WE
2	TQ33462272	PGR S		000 020	4	3B	000	0	000	0					WE	3B	SPL 20

SAMPLE	DEPTH	TEXTURE	COLOUR	-- -MOTTLES----- PED			----STONES----			STRUCT/ CONSIST	SUBS							
				COL	ABUN	CONT	COL	GLEY	>2		>6	LITH	TOT	STR	POR	IMP	SPL	CALC
1	0-26	mc1	10YR53 00 75YR56 00 C					Y	0	0	0							
	26-55	hc1	25Y 63 73 75YR56 00 M					Y	0	0	0							M
	55-120	hc1	10YR54 43				00MN00	00	Y	0	0	0						M
2	0-20	mc1	10YR53 00 75YR56 00 C					Y	0	0	0							
	20-60	c	25Y 72 00 75YR58 00 M					Y	0	0	0							P Y

SAMPLE NO	GRID REF	ASPECT		--WETNESS--				-WHEAT-		-POTS-		M REL		EROSN	FROST	CHEM	ALC	COMMENTS
		USE	GRDNT	GLEY	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT		
1	TQ33902280	FOD	S	02	000		1	1	154	51	118	23	1				WE 1	NO SPL
2	TQ33902270	FOD	S	02	085 085		1	2	141	38	119	24	1				WE 2	SPL 85

-----MOTTLES----- PED -----STONES----- STRUCT/ SUBS

SAMPLE	DEPTH	TEXTURE	COLOUR	MOTTLES			PED		STONES			STRUCT/	SUBS	STR	POR	IMP	SPL	CALC
				COL	ABUN	CONT	COL	GLE	>2	>6	LITH							
1	0-35	mc1	10YR32 00						0	0	0							
	35-65	hc1	10YR43 00				00MN00 00		0	0	HR	1						M
	65-80	c	10YR44 54				00MN00 00		0	0	HR	1						M
	80-90	sc1	10YR44 00						0	0	HR	5						M
	90-120	ms1	10YR44 00						0	0	HR	5						M
2	0-35	hc1	10YR42 00						0	0	0							
	35-45	hc1	10YR43 00						0	0	0							M
	45 66	c	10YR43 00	10YR56 00	F				0	0	HR	1						M
	66 85	c	10YR66 00	75YR58 00	C				0	0	0							M
	85-105	c	25Y 73 00	75YR56 58	M				Y	0	0	0						P
105-120	sc1	25Y 73 00	75YR56 58	C				Y	0	0	0						P	Y