



AQUIND Limited

AQUIND INTERCONNECTOR

Environmental Statement – Volume 3 – Appendix 17.2 Agricultural Land Classification and Soil Resources - Low Resolution

The Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations
2009 – Regulation 5(2)(a)

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

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Aquind Ltd

Agricultural Land Classification and Soil Resources

at

Lovedean, Hampshire

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1 Introduction

- 1.1 Reading Agricultural Consultants Ltd (RAC) is instructed by WSP on behalf of Aquind Ltd to investigate the Agricultural Land Classification (ALC) and soil resources of land between Lovedean and Eastney, Hampshire, by means of a detailed survey of soil and site characteristics.
- 1.2 Guidance for assessing the quality of agricultural land in England and Wales is set out in the Ministry of Agriculture, Fisheries and Food (MAFF) revised guidelines and criteria for grading the quality of agricultural land (1988)¹, and summarised in Natural England's Technical Information Note 049².
- 1.3 Agricultural land in England and Wales is graded between 1 and 5, depending on the extent to which physical or chemical characteristics impose long-term limitations on agricultural use. The principal physical factors influencing grading are climate, site and soil which, together with interactions between them, form the basis for classifying land into one of the five grades.
- 1.4 Grade 1 land is excellent quality agricultural land with very minor or no limitations to agricultural use, and Grade 5 is very poor quality land, with severe limitations due to adverse soil, relief, climate or a combination of these. Grade 3 land is subdivided into Subgrade 3a (good quality land) and Subgrade 3b (moderate quality land). Land which is classified as Grades 1, 2 and 3a in the ALC system is defined as best and most versatile agricultural land.
- 1.5 As explained in Natural England's TIN049, the whole of England and Wales was mapped from reconnaissance field surveys in the late 1960s and early 1970s, to provide general strategic guidance on agricultural land quality for planners. This Provisional Series of maps was published on an Ordnance Survey base at a scale of One Inch to One Mile (1:63,360). The Provisional ALC map shows the site as undifferentiated Grade 3. However, TIN049 explains that:

"These maps are not sufficiently accurate for use in assessment of individual fields or development sites, and should not be used other than as general guidance. They show only five grades: their preparation preceded the subdivision of Grade 3 and the refinement of criteria, which occurred after 1976. They have not been updated and are out of print. A 1:250 000 scale map series based

¹ **MAFF (1988)**. *Agricultural Land Classification of England and Wales. Revised guidelines and criteria for grading the quality of agricultural land*. MAFF Publications.

² **Natural England (2012)**. *Technical Information Note 049 - Agricultural Land Classification: protecting the best and most versatile agricultural land*, Second Edition.

on the same information is available. These are more appropriate for the strategic use originally intended ..."

- 1.6 TIN049 goes on to explain that a definitive ALC grading should be obtained by undertaking a detailed survey according to the published guidelines, at an observation density of one boring per hectare. This survey follows the detailed methodology set out in the MAFF guidelines.

2 Site and climatic conditions

General features, land form and drainage

- 2.1 The survey area is composed of ten Sections, of which four include agricultural land. Of the six non-agricultural Sections, three include open space and recreational land in which soil resources will be disturbed.

Section 1

- 2.2 Section 1 at Lovedean extends to approximately 51ha in total, of which most is in agricultural use. Land to the south-east, north-east and south-west is arable and the north-west and centre is under permanent grass. The site is bounded to the north by other agricultural land, to the west and south by agricultural land and Old Mill Lane and an unnamed lane respectively, and to the east by Broadway Lane. Lovedean Substation is within the site boundary to the east of Section 1. Other non-agricultural land comprises Stoneacre Copse.
- 2.3 Topography is largely level in the east of Section 1, at around 75m above Ordnance Datum (AOD). In the west topography is gently sloping, with altitude falling from 100m AOD in the north to 65m AOD in the south.

Section 2

- 2.4 Section 2 begins at the unnamed lane north of Denmead Farm and continues south to Anmore Road. Other agricultural land is to the east and west of the Section, with Edney's Lane also to the west. All of the land affected in Section 2 is in agricultural use and is arable.
- 2.5 Topography is gently sloping from north to south, with altitude falling from around 65m AOD to 45m AOD.

Section 3

- 2.6 Agricultural land in Section 3 extends to around 17ha of agricultural land under permanent grass. Of the 17ha, only 3.4ha would be disturbed by the proposed construction works.

2.7 Anmore Road marks the northern boundary of Section 3. The southern boundary is at the junction of Soake Road and Hambleton Road. Other agricultural land is to the east, west and south-west of the Section.

2.8 Topography in Section 3 is gently sloping to level, with much of the area at around 40m AOD. Kings Pond and a series of ditches drain the land.

Section 4

2.9 There are two small areas of agricultural land in Section 4, amounting to around 1ha in total. Most is mixed use agricultural land to the west of Hambledon Road in the north of the Section. The remainder comprises a small triangle of arable land to the west of the A3, London Road.

2.10 Both areas are largely level, at 40m and 50m respectively.

Section 6

2.11 There is no agricultural land in Section 6. Non-agricultural land included in the assessment comprises 1.2ha of open space north of the supermarket. The land is low-lying at around 5m AOD.

Section 7

2.12 The study area of Section 7 extends to 5.8ha in total, although is non-agricultural, comprising playing fields and open space. Most of the land assessed is located in the north of Section 7, to the east of the A2030, north of the A27 and south of a railway line. Other open space is to the east. The small area in the south of Section 7 is to the east of Eastern Road and west of the Portsmouth Outdoor Centre. Both areas are level at around 3m AOD.

Section 9

2.13 Land assessed within Section 9 is non-agricultural and comprises open space and recreational land at the University of Portsmouth Student Village (Livingstone Campus) and Bransbury Park. The study area of Section 9 extends to 2.4ha in total. The land is level at around 2 or 4m AOD respectively.

Agro-climatic conditions

2.14 Agro-climatic data have been interpolated from the Meteorological Office's standard 5km grid point data set at two points at representative altitudes of 80m and 40m AOD, and are given in Table 1. The site is warm and wet with moderate moisture deficits. The Field Capacity Day (FCD)

regime is longer than is typical for lowland England, and is considered to be unfavourable for providing opportunities for agricultural field work.

Table 1: Local agro-climatic conditions

Parameter	Value	
	Section 1	Section 3
Altitude	80m	40m
Average Annual Rainfall	871mm	823mm
Accumulated Temperatures >0°C	1,457 day°	1,505 day°
Field Capacity Days	190 days	178 days
Average Moisture Deficit, wheat	100mm	107mm
Average Moisture Deficit, potatoes	91mm	101mm

Soil parent material and soil type

- 2.15 The principal underlying geology mapped by the British Geological Survey³ across Sections 1 and 2 is the Tarrant Chalk Member, comprising soft white chalk with large flint seams. Section 3 is predominantly underlain by the Lambeth Group, which includes sequences of clay with sands and gravels. The south of Section 3 and the agricultural land in Section 4 are underlain by silty clay of the London Clay Formation. Sections 6 and 7 are underlain by the Lewes Nodular Chalk Formation. The north of Section 9 is underlain by London Clay including the component Portsmouth Sand and Whitecliff Sand Members, whilst the south is underlain by laminated clay of the Wittering Formation.
- 2.16 Superficial deposits of glacial Head are mapped in a narrow band running roughly through the centre of Section 1, from north-east to south-west, and continue through Sections 2 and 3. These deposits include gravel, sand and clay. The open space in Section 6 has River Terrace Deposits of sand and gravel. South of this in Section 7 are Raised Marine deposits of gravel, sand, silt and clay, commonly with organic debris. The small area east of Eastern Road has Beach and Tidal Flat Deposits which can include a range of material from silt to shingle and gravel, possibly with peat layers. River Terrace and Tidal Flat deposits are mapped in Section 9.
- 2.17 The Soil Survey of England and Wales soil association mapping⁴ (1:250,000 scale) shows the Upton 1 and Carstens associations to be present in Section 1.
- 2.18 Upton 1 soils develop over chalk and are characterised by shallow, calcareous silty soils which are chalky and flinty. Chalk or chalk rubble is often found within 30cm of the surface. The

³ **British Geological Survey (2018).** *Geology of Britain viewer*, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

⁴ **Soil Survey of England and Wales (1984).** *Soils of South East England (1:250,000)*, Sheet 6

association is mainly found on steeply sloping land and escarpments, although locally is found on moderate slopes. Profiles are well drained, of Wetness Class (WC) I.

- 2.19 The Carstens association develops within Clay-with-flints or Plateau Drift, over chalk. Profiles are typically deep with reddish clay subsoils. The clay is well structured and the profiles are well drained, of WC I⁵.
- 2.20 The Carstens association is mapped throughout Section 2. Sections 3 and 4 are mapped as the Windsor association, which are slowly permeable, seasonally waterlogged, clayey soils mostly with brown subsoils developed on Tertiary clay. The profiles are poorly drained, of WC IV.

3 Agricultural land quality

Soil survey methods

- 3.1 Seventy-two soil profiles were examined across Sections 1, 2, 3 and the northernmost portion of Section 4 using Edelman (Dutch) and narrow augers at an observation density of one per hectare in accordance with the established recommendations for ALC surveys². Four small observation pits were also excavated to examine subsoil structures and to better estimate stone contents. The locations of observations are indicated on Figure RAC7721-1. At each observation point the following characteristics were assessed for each soil horizon up to a maximum of 120cm or any impenetrable layer:
- soil texture;
 - significant stoniness;
 - colour (including localised mottling);
 - consistency;
 - structural condition;
 - free carbonate; and
 - depth.
- 3.2 Where access to the land was not possible, available geotechnical borehole logs have been used to infer the agricultural land quality.

⁵ Jarvis et al (1984). *Soils and Their Use in South East England*. Soil Survey of England and Wales Bulletin 15, Harpenden.

- 3.3 Three topsoil samples were submitted for laboratory determination of particle size distribution, pH, organic matter content and nutrient contents (P, K, Mg). Results are presented in Appendix 1.
- 3.4 Soil Wetness Class (WC) was inferred from the matrix colour, presence or absence of, and depth to, greyish and ochreous gley mottling, and slowly permeable subsoil layers at least 15cm thick, in relation to the number of Field Capacity Days at the location.
- 3.5 Soil droughtiness was investigated by the calculation of moisture balance equations (given in Appendix 2). Crop-adjusted Available Profile Water (AP) is estimated from texture, stoniness and depth, and then compared to a calculated moisture deficit (MD) for the standard crops wheat and potatoes. The MD is a function of potential evapotranspiration and rainfall. Grading of the land can be affected if the AP is insufficient to balance the MD and droughtiness occurs.

Agricultural land classification and site limitations

- 3.6 Assessment of land quality has been carried out according to the MAFF revised ALC guidelines (1988)¹. Soil profiles have been described according to Hodgson (1997)⁶ which is the recognised source for describing soil profiles and characteristics according to the revised ALC guidelines. Where profiles could not be observed to depth due to high stone contents, data from surrounding observations have been used to infer likely subsoil conditions.
- 3.7 Agricultural land quality at this site is affected mostly by soil wetness, with some profiles also limited by droughtiness and topsoil stone.

Section 1

- 3.8 The main soils include mostly brown or dark greyish brown (7.5YR4/3, 10YR4/3 or 10YR4/2 in the Munsell soil colour charts⁷) medium clay loam topsoil of around 29cm thickness. Heavy clay loam and silty clay loam topsoils are also present mostly to the south-east and north-west. In the south-east of Section 1, there is some compaction in the topsoil, which has medium to coarse angular and subangular blocky peds. Few roots are observed in the arable topsoil. Crop residues have been incorporated. The topsoil is very slightly to slightly stony, up to around 15% by volume in total.

⁶ Hodgson, J. M. (Ed.) (1997). *Soil survey field handbook*. Soil Survey Technical Monograph No. 5, Silsoe.

⁷ Munsell Color (2009). *Munsell Soil Color Book*. Grand Rapids, MI, USA

- 3.9 In areas of the site under grass, the topsoil is more friable and forms fine subangular blocky peds. Topsoil stone content is higher where the land use is grass and is estimated from pits to be 20 to 25% in total, including variable proportions of large stones.
- 3.10 Upper subsoil is mostly of brown (7.5YR5/3 or 10YR5/3) clay or heavy clay loam, with occasional medium loam, which is mottled and gleyed. The subsoil is variably stony, estimated at up to around 35% by volume in the north and west where the soil was impenetrable to narrow auger. Where the observed upper subsoil is permeable, the structure is moderately well developed with medium angular blocky peds. At several isolated points, the upper subsoil was firm in consistency and structurally weakly developed, and is assessed as slowly permeable.
- 3.11 Lower subsoil was not able to be observed in many locations due to obstruction of the augers by stones. It is assumed in these locations that clay is or continues to be present at depth (according to upper subsoil texture) in accordance with surrounding observations where clay was able to be observed. This assumption is consistent with existing MAFF ALC data in the locality, at Denmead⁸ and Cowplain⁹.
- 3.12 Profiles in the east which are gleyed but permeable in subsoil horizons are of WC II. Combined with medium clay loam topsoils and 190 FCDs, these profiles are limited by wetness to Subgrade 3a. Across the remainder of the site where subsoils become slowly permeable, the profiles are of WC III or IV. Profiles of WC III with medium loam topsoils are limited to Subgrade 3a and with heavy loam topsoils are of Subgrade 3b. In profiles of WC IV, the grades decrease by one according to topsoil texture.
- 3.13 Topsoil stone content limits agricultural land quality in the north of the site and in other isolated areas (Observation 22) where stones larger than 2cm exceed 15%. The limitation is to Subgrade 3b.
- 3.14 Where subsoil stone contents are highest, there is also occasionally an equal wetness and droughtiness limitation.

Section 2

- 3.15 Observation of soil profiles in Section 2 was severely restricted by relatively high stone contents, which limited the auger depth to an average of 27cm. Topsoil is of dark greyish brown (10YR4/2)

⁸ **ADAS (1995)**. *Winchester District Local Plan, Land at Denmead, Hampshire, Agricultural Land Classification*. Ref 1513/059/95

⁹ **FRCA (1998)**. *Havant Borough Council Local Plan, Objector Sites: Area 1, Cowplain, Hampshire, Agricultural Land Classification*.

medium clay loam or silty clay loam. The stone content is estimated at 15% by volume. A similar upper subsoil horizon was observed in one location to 35cm depth, with an increased stone content of 20%. The upper subsoil is prominently mottled, indicating wetness. It is assumed that all other profiles have upper horizons that reach around 35cm depth. The mottling indicates impeded drainage. On this basis it is assumed that the upper horizons overlie slowly permeable clay lower subsoils, resulting in WC IV and a wetness limitation to Subgrade 3b.

- 3.16 This is consistent with existing MAFF data for the remaining area of Section 2, which identifies medium silty clay topsoil over a heavy silty clay loam upper subsoil, overlying a mottled, stony, slowly permeable clay. Profiles are of WC II to IV and limited to Subgrade 3b by wetness. A second similar soil type is identified however the subsoil is significantly stony, estimated at 50% by volume. There exists a moderately severe droughtiness limitation in these profiles, to Subgrade 3b.

Section 3

- 3.17 Topsoil is of dark grey or grey (10YR4/1 or 5/1) medium clay loam or silty clay loam of 29cm average depth. Most of the topsoil in Section 3 is only slightly stony, at up to around 5%, other than in the north where the content is closer to 15%.
- 3.18 Throughout the section soil profiles are significantly mottled from the surface. Subsoil horizons are grey (10YR5/1) and predominantly of clay. Occasionally a grey heavy clay loam or silty clay loam upper subsoil horizon is present. Stone content is mostly between 15 and 30%. In the south of the Section, east and west of Hambleton Road, the stone content is slight at up to 5%. Profiles in which an upper subsoil horizon is identified over the slowly permeable clay are of WC III and are limited by wetness to Subgrade 3a. Profiles in which the topsoil directly overlies clay are poorly drained, of WC IV, and are limited more severely to Subgrade 3b or Grade 4, where the clay is shallowest.
- 3.19 A second soil type identified north of Hambleton Road includes slightly stony sandy loam topsoil of 35cm thickness. This overlies slightly stony to stoneless grey sandy clay loam to depth. The profile is prominently mottled throughout but is permeable. The profile is assessed as WC II which results in a slight wetness limitation to Grade 2.

Section 4

- 3.20 Land affected in Section 4 extends to around 1ha in total. There is no available survey data for land in the north of Section 4, however it is considered likely to be of Subgrade 3a in line with observations made in the south of Section 3.

- 3.21 Borehole records from ground investigations describe the soil profile in the south of Section 4. The topsoil is noted as 30cm of “soft brown slightly sandy slightly gravelly clay”. The description is suggestive of a medium clay loam topsoil. Upper subsoil is noted as made ground, comprising “structureless chalk, composed of creamy white mottled orangish brown sandy silty gravel”. From around 50cm and extending to depth is “firm orangish brown mottled greyish brown slightly sandy slightly gravelly clay”.
- 3.22 The lower subsoil is likely to be slowly permeable, which would place the profile in WC III (albeit on the boundary of WC IV). With medium clay loam topsoil, the limitation is to Subgrade 3a.

Section 6

- 3.23 Borehole records from the ground investigations identify made ground in Section 6. The land is non-agricultural. Soil profiles include topsoil of “dark brown slightly gravelly clay” of 20 cm thickness. Within the terms of ALC, this is likely to comprise heavy clay loam or clay. Upper subsoils are “light brown, slightly sandy, slightly gravelly clay” to between 40 cm and 60 cm, over “orange brown slightly gravelly clay” or “light brown slightly gravelly sandy clay” lower subsoil.
- 3.24 The consistency is described as soft which suggests the soils may be permeable. Under the climatic conditions of the locality, soils of WC I or II with clay or heavy clay loam topsoils would be limited to Subgrade 3a or 3b respectively if the land were in agricultural use.

Section 9

- 3.25 Borehole records from the ground investigations identify soils in Section 9 as comprising 20cm to 30cm of firm, slightly sandy clay with gravel. In an ALC context, this is likely to be classified as a clay loam. Two out of three boreholes indicate the topsoil to be made ground, having been previously disturbed. The undisturbed profile is non-agricultural.
- 3.26 Upper subsoil is described as “firm brown very gravelly very silty fine to coarse sand”, “slightly sandy very silty gravel” or “brown clayey very sandy gravel”. In an ALC context, these are likely to be stony sandy silt loam to medium clay loam subsoil, with at least 20% stone.
- 3.27 The profile in agricultural land is in an area of permanent grass. Based on aerial photography, proximity to the sea/exposure and the borehole record, it is considered most likely that the land will be of Subgrade 3b.
- 3.28 The areas of each ALC grade of land on the site are given in Table 2 and are shown in Figure RAC7721-2. Photographs taken at the site are given in Appendix 3.

Table 2: Agricultural land classification

Grade	Description	Area (ha)	% of agri land
3a	Good quality	12.2	49
3b	Moderate quality	8.2	33
4	Poor quality	4.5	18
Total Agricultural		24.9	100
Non-Agricultural		1.8	-

Appendix 1: Laboratory Data

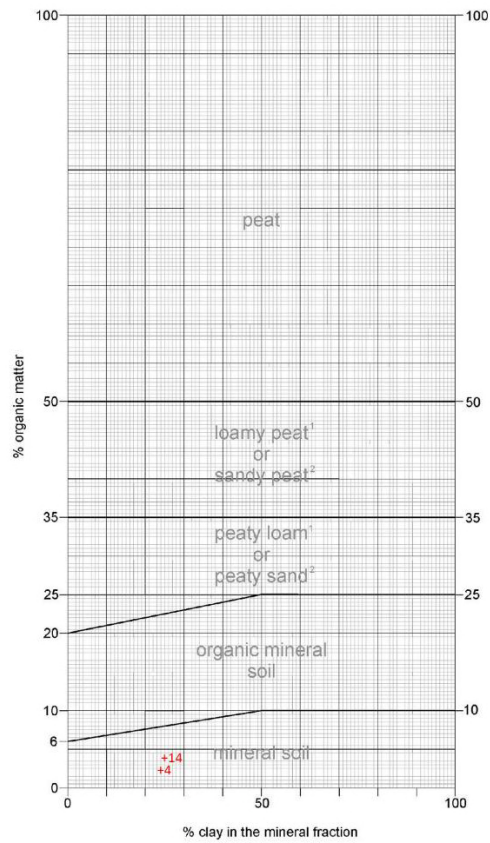
Determinand	Site 4	Site 14	Site	Units
Sand 2.00-0.063 mm	21	14	22	% w/w
Silt 0.063-0.002 mm	55	61	45	% w/w
Clay <0.002 mm	24	25	33	% w/w
Organic Matter	2.2	3.8	9.3	% w/w
Texture	Medium Clay Loam	Medium Silty Clay Loam	Heavy Clay Loam	

Determinand	Site 4	Site 14	Site	Units
Soil pH	6.6	5.9	5.7	
Phosphorus (P)	12.6	17.8	5.4	Mg/l (av)
Potassium (K)	75.8	123	57.6	Mg/l (av)
Magnesium (Mg)	62.8	102	113	Mg/l (av)

Determinand	Site 4	Site 14	Site	Units
Phosphorus (P)	1	2	0	ADAS Index
Potassium (K)	1	2-	0	ADAS Index
Magnesium (Mg)	2	3	3	ADAS Index

Soil Texture by Particle Size Analysis

Organic Matter Class



¹ Less than 50% sand in the mineral fraction

² 50% sand or more in the mineral fraction

Appendix 2: Soil Profile Summaries and Droughtiness Calculations

Wetness / workability limitations are determined according to the methodology given in Appendix 3 of the ALC guidelines, MAFF 1988

Droughtiness calculations are made according to the methodology given in Appendix 4 of the ALC guidelines, MAFF 1988.

Grades are shown for drought, wetness and any other soil or site factors which are relevant. The overall Grade is set by the most limiting factor and shown on the right.

Stone types		
%	TAv	Eav
hard	1	0.5
chalk	10	7

hard flint & pebble

Climate Data	
MDwheat	100
MDpotato	91
FCD	190

Wetness Class Guidelines	<i>II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
SPL within 80cm, gleying within 40cm	>79cm	51-79cm	<51cm	
SPL within 80cm, gleying at 40-70cm	>68cm	<68cm		
No SPL but gleying within 40cm	coarse subsoil	<i>I</i>	other cases	<i>II</i>

Maximum depth of auger penetration is underlined

Site No.	Depth cm	Texture	CaCO ₃	Colour	Mottle colour	abundance	stone% hard	stone% chalk	Structure	APwheat mm	AP potato mm	Gley	SPL	WC	Wetness grade WE	Final Grade	Limiting Factor(s)
1	0-20	hCL		10YR4/3			15			31	31	n	n	<i>III</i>	3b	3b	WE
	20-65	C		7.5YR5/4	Fe	many	10	2	poor	45	53	(y)	y				
	65-120	Chalk		white						39	5	n	n				
										Total	114	89	WC improved due to underlying chalk				
										MD	14	-2					
										Droughtiness grade (DR)		2	2				
2	0-30	mCL		7.5YR4/3			12			48	48	n	n	<i>II</i>	3a	3a	WE
	30-50	hZCL		7.5YR5/3	Fe	com.	15			29	29	y	n				
	50-60	C		10YR5/4	Fe	com.	10			7	15	n	n				
	<u>60</u> -100	C		10YR5/4	Fe	com.	10	2		29	14	n	n				
	100-120	Chalk								14	0	n	n				
									Total	127	106						
									MD	27	15						
										Droughtiness grade(DR)		2	1				
3	0-25	mCL		7.5YR4/3			8		-	42	42	n	n	<i>II</i>	3a	3a	WE

25	35	mCL	7.5YR5/3	FeMn	few/com	0		16	16	(y)	n		
35	45	hZCL	7.5YR5/3	Fe	few	0		17	17	n	n		
45	120	C	7.5YR5/4	Fe	many	0	poor	56	33	(y)	y		
Total								130	107				
MD								30	16				
Droughtiness grade(DR)								1	1				

4/P1	T	0	30	mCL		7.5YR4/3		10	-	49	49	n	n	//	3a	3a	WE
		30	60	C		7.5YR5/3	Fe	com	0	mod/poor	40	48	y	n			
		<u>60</u>	120	C		7.5YR5/3	Fe	com	0	mod/poor	48	16	y	n			
Total								137	113								
MD								37	22								
Droughtiness grade(DR)								1	1								

5	T	0	30	hCL	n	10YR4/2		10	-	49	49	n	n	//	3a	3a	WE
		30	65	C	n	7.5YR5/3	Fe	com.	4		42	54	y	n			
		<u>65</u>	120	C	n	7.5YR5/3	Fe	com.	15		38	7	y	n			
Total								129	110								
MD								29	19								
Droughtiness grade (DR)								2	1								

6	T	0	28	hZCL	n	10YR4/2		6	-	50	50	n	n	//	3a	3a	WE
		28	50	hCL	n	10YR4/2	FeMn	com.	6		33	33	y	n			
		<u>50</u>	120	C	n	10YR5/3	Fe	com.	15		48	28	y	n			
Total								132	111								
MD								32	20								
Droughtiness grade (DR)								1	1								

7	T	0	30	hZCL	n	10YR4/2		6	-	54	54	n	n	//	3a	3a	WE
		30	50	ZC	n	10YR4/2	FeMn	com.	4		29	29	y	n			
		50	82	hCL	n	10YR4/2	FeMn	com.	4		31	31	y	n			
		<u>82</u>	120	hCL	n	7.5YR5/3	FeMn	com.	15	poor	23	0	y	y			
Total								136	113								
MD																	
Droughtiness grade (DR)																	

		<u>15</u>	35	mCL		10YR4/2			30		23	23	n	n				
		35	120	C		7.5YR5/3	Fe	com	25	poor	53	35	y	y				
										Total	98	80						ST >2cm >15%
										MD	-2	-11						
										Droughtiness grade(DR)		3a	3a					
13	T	0	10	mCL		10YR4/2			20	-	15	15	n	n	IV	3b	3b	WE ST
		<u>10</u>	30	mCL		10YR4/2			30		23	23	n	n				
		30	120	C		7.5YR5/3	Fe	com	25	poor	58	40	y	y				
										Total	95	78						ST >2cm >15%
										MD	-5	-13						3b
										Droughtiness grade(DR)		3a	3a					
14	T	0	20	mZCL		10YR4/3			20	-	31	31	n	n	IV	3b	3b	WE
		<u>20</u>	35	mZCL		10YR4/3			20		21	21	n	n				
		35	120	C		7.5YR5/3	Fe	com	25	poor	53	35	y	y				
										Total	104	87						
										MD	4	-5						
										Droughtiness grade(DR)		3a	2					
15	T	0	15	hZCL	n	10YR4/3			20	-	23	23	n	n	IV	4	4	WE
		<u>15</u>	30	hZCL	n	10YR4/3			20		21	21	n	n				
		30	120	C	n	7.5YR5/3	FeMn	com	25	poor	58	40	y	y				
										Total	101	84						grass
										MD	1	-7						
										Droughtiness grade (DR)		3a	2					
16	T	0	15	hZCL	n	10YR4/3			20	-	23	23	n	n	IV	4	4	WE
		<u>15</u>	30	hZCL	n	10YR4/3	FeMn	few	25		20	20	n	n				
		30	120	C	n	7.5YR5/3	FeMn	com	25	poor	58	40	y	y				
										Total	100	83						ST >2cm >15%
										MD	0	-8						3b
										Droughtiness grade (DR)		3a	2					

17	T	0	30	mZCL	n	10YR3/2			20	-	46	46	n	n	IV	3b	3b	WE
		<u>30</u>	120	C	n	7.5YR5/3	FeMn	com	25	poor	58	40	y	y				
									Total		104	86					grass	
									MD		4	-5						
									Droughtiness grade (DR)		3a	2						
18	T	0	30	mZCL	n	10YR3/2			20	-	46	46	n	n	//	3a	3a	WE
		<u>30</u>	60	C	n	7.5YR5/3	FeMn	com	25		31	37	y	n				
		60	120	C	n	7.5YR5/3	FeMn	com	35		32	11	y	n				
									Total		109	94					grass	
									MD		9	3					Within glacial Head deposits	
								Droughtiness grade (DR)		2	2							
19	T	0	30	mCL		7.5YR5/3			25	-	41	41	n	n	//	3a	3a	WE DR
			30	40	hCL		7.5YR5/3	Fe	com	35		11	11	y	n			
			<u>40</u>	60	hCL		7.5YR5/3	Fe	com	35		17	22	y	n			
			60	120	C		7.5YR5/3	Fe	com	35		32	11	y	n			
									Total		102	84					Within glacial Head deposits	
								MD		2	-7							
								Droughtiness grade(DR)		3a	2							
20	T	0	20	mCL	n	10YR3/2			10	-	33	33	n	n	//	3a	3a	WE
			<u>20</u>	30	mCL	n	10YR4/2			20		13	13	n	n			
			30	60	hCL	n	7.5YR5/3	Fe	com	35		28	32	y	n			
			60	120	C	n	7.5YR5/3	Fe	com	35		32	11	y	n			
									Total		106	89					grass	
								MD		6	-2					Within glacial Head deposits		
								Droughtiness grade (DR)		2	2							
21	T	0	30	mZCL		10YR4/3			10	-	52	52	n	n	IV	3b	3b	WE
			30	65	C		7.5YR5/3	Fe	com	5	poor	35	43	y	y			
			<u>65</u>	120	C		7.5YR5/3	Fe	com	5	poor	37	6	y	y			

											Total	123	101					
											MD	23	10					
											Droughtiness grade(DR)		2	1				
22	T	0	30	mCL		10YR4/2		25	-	41	41	n	n	III	3a	3b	ST	
		<u>30</u>	65	hCL		7.5YR5/3	Fe	com		35	32	y	n					
		65	120	C		7.5YR5/3	Fe	com		25	poor	30	5	y	y			
											Total	102	84					
											MD	2	-7					
											Droughtiness grade(DR)		3a	2				
23	T	0	25	mZCL		10YR4/3		20	-	39	39	n	n	III	3a	3a	WE DR	
		25	35	hCL		7.5YR5/3	Fe	com		35	11	y	n					
		<u>35</u>	60	hCL		7.5YR5/3	Fe	com		35	23	y	n					
		60	120	C		7.5YR5/3	Fe	com		25	poor	32	10	y	y			
											Total	104	86					
											MD	4	-5					
											Droughtiness grade(DR)		3a	2				
24	T	0	36	mCL		7.5YR4/3		20	-	53	53	n	n	IV	3b	3b	WE	
		36	65	hCL		7.5YR5/3	Fe	com		35	poor	18	24	y	y			
		<u>65</u>	120	hCL		7.5YR5/3	Fe	com		35	poor	26	4	y	y			
											Total	97	80					
											MD	-3	-11					
											Droughtiness grade(DR)		3a	3a				
25	T	0	25	mCL	n	10YR4/3		5	-	43	43	n	n	I	2	2	WE	
		25	45	hCL	n	10YR4/3		15		28	28	n	n					
		45	120	mSL	n	10YR5/6	Fe	few		3	82	36	n	n				
											Total	152	107					
											MD	52	16					
											Droughtiness grade (DR)		1	1				
26	T	0	25	hZCL	n	10YR4/3		10	-	43	43	n	n	III	3b	3b	WE	

ST >2cm >15%

grass

		25	40	C	n	10YR4/3	FeMn	few	15		21	21	n	n					
		<u>40</u>	120	C	n	7.5YR5/3	FeMn	com	20	poor	51	32	y	y					
										Total	114	95						grass	
										MD	14	4							
										Droughtiness grade (DR)	2	2							
27	T	0	15	mCL	n	10YR4/3			12	-	24	24	n	n	III	3a		3a	WE DR
		<u>15</u>	40	mCL	n	10YR4/3	FeMn	few	20		33	33	n	n					
		40	120	C	n	7.5YR5/3	FeMn	com	25	poor	48	30	y	y					
										Total	104	86						grass	
										MD	4	-5							
										Droughtiness grade (DR)	3a	2							
28	T	0	20	mCL		10YR4/2	Fe	com	25	-	28	28	y	n	IV	3b		3b	WE
		<u>20</u>	30	mCL		10YR4/2	Fe	com	25		28	28	y	n					
		30	120	C		10YR5/3	Fe	many	30	poor	64	47	y	y					
										Total	91	75						ST. >2cm 15%	
										MD	-9	-17							
										Droughtiness grade (DR)	3a	3a							
29	T	0	27	mCL		10YR4/2			20		39	39	n	n	IV	3b		3b	WE
		27	120	C		10YR5/3	Fe	many	10	poor	72	51	y	y					
										Total	111	90						ST. >2cm 15%	
										MD	11	-1							
										Droughtiness grade (DR)	2	2							
30	T	0	10	mCL		10YR4/2			25		14	14	n	n	IV	3b		3b	WE
		<u>10</u>	30	mCL		10YR4/2			30		23	23	n	n					
		30	120	C		10YR5/3	Fe	many	30	poor	54	38	y	y					
										Total	91	74						ST. >2cm 15%	
										MD	-9	-17							
										Droughtiness grade (DR)	3a	3a							
31	T	0	10	mCL		10YR4/2			25		14	14	n	n	IV	3b		3b	WE ST

			<u>10</u>	30	mCL		10YR4/2			30		23	23	n	n				
			30	120	C		10YR5/3	Fe	many	30	poor	54	38	y	y				
							Total				91	74				ST. >2cm	20%		
							MD				-9	-17							
							Droughtiness grade (DR)				3a	3a							
32	T		0	10	mCL		10YR4/2			25		14	14	n	n	IV	3b	3b	WE ST
			<u>10</u>	30	mCL		10YR4/2			30		23	23	n	n				
			30	120	C		10YR5/3	Fe	many	30	poor	54	38	y	y				
							Total				91	74				ST. >2cm	20%		
							MD				-9	-17							
							Droughtiness grade (DR)				3a	3a							
33	T		0	10	mCL		10YR4/2			25		14	14	n	n	IV	3b	3b	WE ST
			<u>10</u>	30	mCL		10YR4/2			30		23	23	n	n				
			30	120	C		10YR5/3	Fe	many	30	poor	54	38	y	y				
							Total				91	74				ST. >2cm	20%		
							MD				-9	-17							
							Droughtiness grade (DR)				3a	3a							
34	T		0	10	mCL		10YR4/2			25		14	14	n	n	IV	3b	3b	WE ST
			<u>10</u>	30	mCL		10YR4/2			30		23	23	n	n				
			30	120	C		10YR5/3	Fe	many	30	poor	54	38	y	y				
							Total				91	74				ST. >2cm	20%		
							MD				-9	-17							
							Droughtiness grade (DR)				3a	3a							
35	T		0	5	mCL		10YR4/2			25		7	7	n	n	IV	3b	3b	WE ST
			<u>5</u>	30	mCL		10YR4/2			30		29	29	n	n				
			30	120	C		10YR5/3	Fe	many	30	poor	54	38	y	y				
							Total				90	73				ST. >2cm	20%		
							MD				-10	-18							
							Droughtiness grade (DR)				3a	3a							

36	T	0	30	mCL		10YR4/2			15		46	46	n	n	IV	3b	3b	WE	
		<u>30</u>	120	C		10YR5/3	Fe	com	30	poor	54	38	y	y					
										Total	100	84					ST. >2cm	7%	
										MD	0	-7							
Droughtiness grade (DR)										3a	2								
37	T	0	30	hCL		10YR4/2			15		46	46	n	n	IV	3b	3b	WE	
		30	<u>40</u>	C		10YR5/3	Fe	com	15		14	14	y	n					
		40	120	C		10YR5/3	Fe	many	30	poor	45	28	y	y					
										Total	105	88					ST. >2cm	7%	
									MD	5	-3								
Droughtiness grade (DR)										2	2								
38	T	0	10	mCL	n	10YR4/2			20	-	15	15	n	n	IV	3b	3b	WE	
		10	120	C	n	7.5YR5/3	Fe	many	25	poor	78	60	y	y					
										Total	92	75					ST. >2cm	10%	
										MD	-8	-16					Dense oilseed rape	Very dry ground	
Droughtiness grade (DR)										3a	3a								
39	T	0	25	mCL	n	10YR4/2			15	-	39	39	n	n	//	3a	3a	WE	
		25	90	C	n	10YR4/2	Fe	many	5		69	69	y	n					
		90	120	C	n	10YR4/2	Fe	v.many	5		23	0	y	n					
										Total	130	107					ST. >2cm	5%	
									MD	30	16					Dense oilseed rape	Very dry ground		
Droughtiness grade (DR)										1	1								
40	T	0	20	mCL	n	10YR4/2			20	-	29	29	n	n	IV	3b	3b	WE	
		20	45	C	n	7.5YR5/3	Fe	many	10		36	36	y	n					
		45	120	C	n	7.5YR5/3	Femn	v.many	5	poor	53	31	y	y					
										Total	118	96					ST. >2cm	10%	
									MD	18	5					Dense oilseed rape	Very dry ground		
Droughtiness grade (DR)										2	2								
41	T	0	25	mCL	n	10YR4/2			22	-	36	36	n	n	IV	3b	3b	WE	

		25	43	C	n	7.5YR5/3	Fe	com	10		26	26	y	n				
		43	120	C	n	7.5YR5/3	Femn	v.many	5	poor	55	33	y	y				
										Total	117	95			ST. >2cm	12%		
										MD	17	4			Dense oilseed rape	Very dry ground		
										Droughtiness grade (DR)		2	2					
42	T	0	10	mCL	n	10YR4/2			20	-	15	15	n	n	IV	3b	3b	WE
		<u>10</u>	30	mCL	n	10YR4/2			25		78	60	n	n				
		30	120	C	n	7.5YR5/3	Fe	many	25	poor	78	60	y	y				
										Total	92	75			ST. >2cm	10%	Inferred profile	
										MD	-8	-16			Dense oilseed rape	Very dry ground		
										Droughtiness grade (DR)		3a	3a					
43	T	0	25	mCL	n	10YR4/2			15	-	39	39	n	n	//	3a	3a	WE
		25	90	C	n	10YR4/2	Fe	many	10		65	65	y	n				
		90	120	C	n	10YR4/2	Fe	v.many	5		23	0	y	n				
										Total	127	104			ST. >2cm	5%		
										MD	27	13			Dense oilseed rape	Very dry ground		
										Droughtiness grade (DR)		2	1					
44	T	0	22	mCL	n	10YR4/2			22	-	31	31	n	n	IV	3b	3b	WE
		22	35	C	n	5YR4/6	Femn	v.many	10	poor	15	15	y	y				
		<u>35</u>	120	C	n	7.5YR5/3	Femn	v.many	25	poor	53	35	y	y				
										Total	99	82			ST. >2cm	12%		
										MD	-1	-9			Dense oilseed rape	Very dry ground		
										Droughtiness grade (DR)		3a	2					
45	T	0	22	mCL	n	10YR4/2			15	-	34	34	n	n	IV	3b	3b	WE
		<u>22</u>	35	C	n	7.5YR5/3	Fe	com	30	poor	12	12	y	y				
		35	120	C	n	7.5YR5/3	Fe	com	30	poor	49	33	y	y				
										Total	96	79			Stopped on Stone inferred from 2018 data			
										MD	-4	-12			ST. >2cm	7%		
										Droughtiness grade (DR)		3a	3a					

46	T	0	22	mCL	n	10YR4/2			15	-	34	34	n	n	IV	3b	3b	WE	
		<u>22</u>	35	C	n	7.5YR5/3	Fe	com	30	poor	12	12	y	y					
		35	120	C	n	7.5YR5/3	Fe	com	30	poor	49	33	y	y					
										Total	96	79							
									MD	-4	-12							Stopped on Stone inferred from 2018 data	
																			ST. >2cm 7%
Droughtiness grade (DR)																			
47	T	0	20	mCL	n	10YR4/2			25	-	28	28	n	n	IV	3b	3b	WE ST	
		<u>20</u>	30	C	n	5YR4/6	Femn	v.many	25	poor	10	10	y	y					
		30	120	C	n	5YR4/6	Femn	v.many	25	poor	58	40	y	y					
										Total	95	78							
									MD	-5	-14								ST. >2cm 15%
																			Dense oilseed rape Very dry ground
Droughtiness grade (DR)																			
48	T	0	23	mCL	n	10YR4/2			20	-	34	34	n	n	IV	3b	3b	WE	
		23	30	C	n	5YR4/6	Femn	v.many	20	poor	7	7	y	y					
		30	120	C	n	5YR4/6	Femn	v.many	25	poor	58	40	y	y					
										Total	99	81							
									MD	-1	-10								ST. >2cm 10%
																			Dense oilseed rape Very dry ground
Droughtiness grade (DR)																			
49	T	0	26	mCL	n	10YR4/2			15	-	40	40	n	n	IV	3b	3b	WE	
		26	40	C	n	5YR4/6	Femn	v.many	10	poor	17	17	y	y					
		<u>40</u>	120	C	n	5YR4/6	Femn	v.many	25	poor	48	30	y	y					
										Total	104	87							
									MD	4	-4								ST. >2cm 7%
																			Dense oilseed rape Very dry ground
Droughtiness grade (DR)																			
50	T	0	15	mZCL	n	10YR4/2			15	-	24	24	n	n	IV	3b	3b	WE	
		<u>15</u>	30	mZCL	n	10YR4/2	Fe	many	20		21	21	y	n					
		30	120	C	n	10YR5/3	Fe	many	25	poor	58	40	y	y					
										Total	103	85							
									MD	3	-6								ST. >2cm 10%

														Droughtiness grade (DR)		3a	2							
51	T	0	15	mZCL	n	10YR4/2			15	-	24	24	n	n	IV	3b	3b		WE					
		<u>15</u>	30	mZCL	n	10YR4/2	Fe	many	20		21	21	y	n										
		30	120	C	n	10YR5/3	Fe	many	25	poor	58	40	y	y										
											Total	103	85					ST. >2cm 10%						
										MD	3	-6												
														Droughtiness grade (DR)		3a	2							
52	T	0	15	mZCL	n	10YR4/2			15	-	24	24	n	n	IV	3b	3b		WE					
		<u>15</u>	30	mZCL	n	10YR4/2	Fe	many	20		21	21	y	n										
		30	120	C	n	10YR5/3	Fe	many	25	poor	58	40	y	y										
											Total	103	85					ST. >2cm 10%						
										MD	3	-6												
														Droughtiness grade (DR)		3a	2							
53	T	0	20	mCL	n	10YR4/2			15	-	31	31	n	n	IV	3b	3b		WE					
		20	35	mZCL	n	10YR4/2	Fe	com	20		21	21	y	n										
		<u>35</u>	120	C	n	10YR5/3	Fe	many	25	poor	53	35	y	y										
											Total	104	87					ST. >2cm 10%						
										MD	4	-4												
														Droughtiness grade (DR)		3a	2							
54	T	0	10	mCL	n	10YR4/2			15	-	15	15	n	n	IV	3b	3b		WE					
		<u>10</u>	35	mCL	n	10YR4/2	Fe	com	20		33	33	y	n										
		35	120	C	n	10YR5/3	Fe	many	25	poor	53	35	y	y										
											Total	101	83					ST. >2cm 10%						
										MD	1	-8												
														Droughtiness grade (DR)		3a	2							
55	T	0	35	mCL	n	10YR4/2			15	-	54	54	n	n	IV	3b	3b		WE					
		<u>35</u>	120	C	n	10YR5/3	Fe	many	25	poor	53	35	y	y										
												Total	107	89					ST. >2cm 10%					
											MD	7	-2											

													Droughtiness grade (DR)		2	2				
56	T	0	35	mCL	n	10YR4/2			15	-	54	54	n	n	IV	3b	3b	WE		
		<u>35</u>	120	C	n	10YR5/3	Fe	many	25	poor	53	35	y	y						
												Total	107	89	ST. >2cm 10%					
												MD	7	-2						
														Droughtiness grade (DR)		2	2			
57	T	0	10	mCL	n	10YR4/1	Fe	many	5	-	17	17	y	n	IV	4	4	WE		
		<u>10</u>	20	hCL	n	10YR4/1	Fe	many	30		12	12	y	n						
	20	40	C	n	10YR5/1	Fe	v.many	30	poor	19	19	y	y							
	40	120	C	n	10YR5/1	Fe	v.many	30	poor	45	28	y	y							
												Total	92	76	ST. >2cm 5>%					
											MD	-8	-15							
													Droughtiness grade (DR)		3a	3a				
58	T	0	15	hCL	n	10YR4/1	Fe	v.many	15	-	23	23	y	n	IV	4	4	WE		
		<u>15</u>	20	C	n	10YR5/2	Fe	v.many	25	poor	5	5	y	y						
	20	40	C	n	10YR5/1	Fe	v.many	30	poor	19	19	y	y							
	40	120	C	n	10YR5/1	Fe	v.many	30	poor	45	28	y	y							
												Total	92	75	ST. >2cm 5%					
											MD	-8	-16							
													Droughtiness grade (DR)		3a	3a				
59	T	0	10	mCL	n	10YR4/1	Fe	many	5	-	17	17	y	n	IV	4	4	WE		
		<u>10</u>	20	hCL	n	10YR4/1	Fe	many	5		15	15	y	n						
	20	40	C	n	10YR5/1	Fe	v.many	30	poor	19	19	y	y							
	40	120	C	Slight	10YR5/1	Fe	v.many	30	poor	45	28	y	y							
												Total	96	79	ST. >2cm N/A					
											MD	-4	-12							
													Droughtiness grade (DR)		3a	3a				
60	T	0	15	mCL	n	10YR4/1	Fe	many	5	-	26	26	y	n	IV	4	4	WE		
		<u>15</u>	20	hCL	n	10YR4/1	Fe	many	5		8	8	y	n						

20	40	C	n	10YR5/1	Fe	v.many	30	poor	19	19	y	y
40	120	C	n	10YR5/1	Fe	v.many	30	poor	45	28	y	y
Total									97	80	ST. >2cm N/A	
MD									-3	-11	TS borderline heavy	

Droughtiness grade (DR) 3a 3a

61	T	0	22	mCL	n	10YR4/1	Fe	many	10	-	36	36	y	n	IV	3b	3b	WE
		22	50	C	n	10YR5/1	Fe	v.many	15	poor	31	31	y	y				
		50	120	C	n	10YR5/1	Fe	v.many	10	poor	44	24	y	y				
Total									112	91	ST. >2cm 5%							
MD									12	0								

Droughtiness grade (DR) 2 2

62	T	0	22	mCL	n	10YR4/1	Fe	many	15	-	34	34	y	n	IV	3b	3b	WE
		22	50	C	n	10YR5/1	Fe	v.many	20	poor	30	30	y	y				
		50	120	C	n	10YR5/1	Fe	v.many	30	poor	35	19	y	y				
Total									99	82	ST. >2cm 5%							
MD									-1	-9								

Droughtiness grade (DR) 3a 2

63	T	0	30	mCL	n	10YR4/1	Fe	com	15	-	46	46	y	n	IV	3b	3b	WE
		30	120	C	n	10YR5/1	Fe	v.many	30	poor	54	38	y	y				
Total									100	84	ST. >2cm 5%							
MD									0	-7								

Droughtiness grade (DR) 3a 2

64	T	0	25	mCL	n	10YR4/1	Fe	many	3	-	44	44	y	n	III	3a	3a	WE
		25	62	hCL	n	10YR5/1	Fe	many	3		51	58	y	n				
		62	120	C	n	10YR5/1	Fe	many	0	poor	41	10	y	y				
Total									135	112	ST. >2cm N/A							
MD									35	21								

Droughtiness grade (DR) 1 1

65	T	0	25	mCL	n	10YR4/1	Fe	com	15	-	39	39	y	n	III	3a	3a	WE DR
-----------	---	---	----	-----	---	---------	----	-----	----	---	----	----	---	---	-----	----	-----------	-------

		25	62	hCL	n	10YR5/1	Fe	com	30		37	43	y	n					
		62	120	C	n	10YR5/1	Fe	many	30	poor	29	8	y	y					
										Total	105	89			ST. >2cm	N/A			
										MD	5	-2							
										Droughtiness grade (DR)	2	2							
66	T	0	35	mCL	n	10YR4/1	Fe	many	5	-	60	60	y	n	IV	3b	3b		WE
		35	50	C	n	10YR5/1	Fe	many	25	mod/poor	18	18	y	y					
		50	120	C	n	10YR5/1	Fe	many	30	poor	35	19	y	y					
										Total	114	97			ST. >2cm	N/A			
										MD	14	6							
										Droughtiness grade (DR)	2	2							
67	T	0	30	mCL	n	10YR4/1	Fe	many	5	-	51	51	y	n	IV	3b	3b		WE
		30	50	C	n	10YR5/2	Fe	many	15	poor	22	22	y	y					
		50	120	C	n	10YR5/1	Fe	many	30	poor	35	19	y	y					
										Total	109	93			ST. >2cm	N/A			
										MD	9	2							
										Droughtiness grade (DR)	2	2							
68	T	0	35	SL	n	10YR4/1	Fe	many	5	-	57	57	y	n	//	2	2		WE
		35	60	SCL	n	10YR5/1	Fe	many	3		32	36	y	n					
		60	80	SCL	n	10YR5/1	Fe	many	0		20	15	y	n					
		80	120	SCL	n	10YR5/1	Fe	many	0		40	0	y	n					
										Total	148	108			ST. >2cm	N/A			
										MD	48	17			USS borderline mSL				
										Droughtiness grade (DR)	1	1							
69	T	0	10	mCL	n	10YR4/1	Fe	many	3	-	17	17	y	n	IV	3b	3b		WE
		10	40	C	n	10YR5/2	Fe	many	20	poor	32	32	y	y					
		40	120	C	n	10YR5/1	Fe	many	30	poor	45	28	y	y					
										Total	94	77			ST. >2cm	N/A			
										MD	-6	-14							

										Droughtiness grade (DR)		3a	3a					
70	T	0	30	mZCL	n	10YR4/1	Fe	many	5	-	54	54	y	n	///	3a	3a	WE
		30	55	hZCL	n	10YR5/1	Fe	many	0		39	43	y	n				
		55	120	C	n	10YR5/1	Fe	many	0	poor	46	20	y	y				
											Total	139	116					ST. >2cm
										MD	39	25						
										Droughtiness grade (DR)		1	1					
71	T	0	28	mZCL	n	10YR4/1	Fe	many	3	-	52	52	y	n	///	3a	3a	WE
		28	56	hZCL	n	10YR5/1	Fe	many	3		42	46	y	n				
		56	120	ZC	n	10YR5/1	Fe	v.many	5	poor	43	16	y	y				
											Total	137	114					ST. >2cm
										MD	37	23						
										Droughtiness grade (DR)		1	1					
72	T	0	38	mZCL	n	10YR4/1	Fe	com	3	-	70	70	y	n	///	3a	3a	WE
		38	55	hZCL	n	10YR5/1	Fe	many	3		25	28	y	n				
		55	120	hZCL	n	10YR5/1	Femn	many	0	poor	39	18	y	y				
											Total	134	116					ST. >2cm
										MD	34	25					Moved to SU 66730 11034	
										Droughtiness grade (DR)		1	1					

Appendix 3: Site Photographs



Pit 1

7721



Pit 1 Topsoil and Subsoil

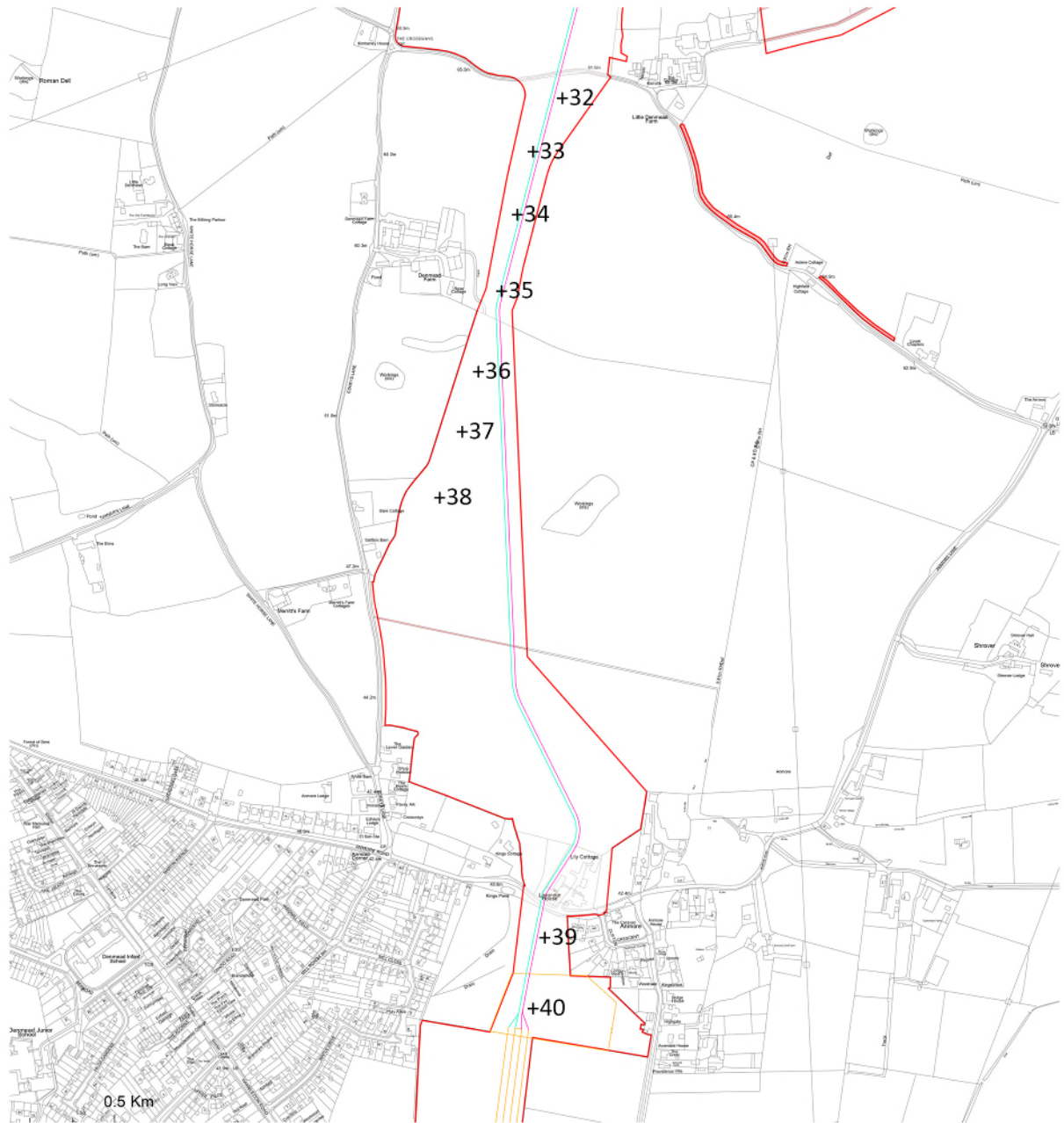
30



Pit 2



Pit 2 Topsoil Stone



- Survey Area
- +1 Auger Observation
- .P1 Pit Observation



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Figure 17.1: Observations

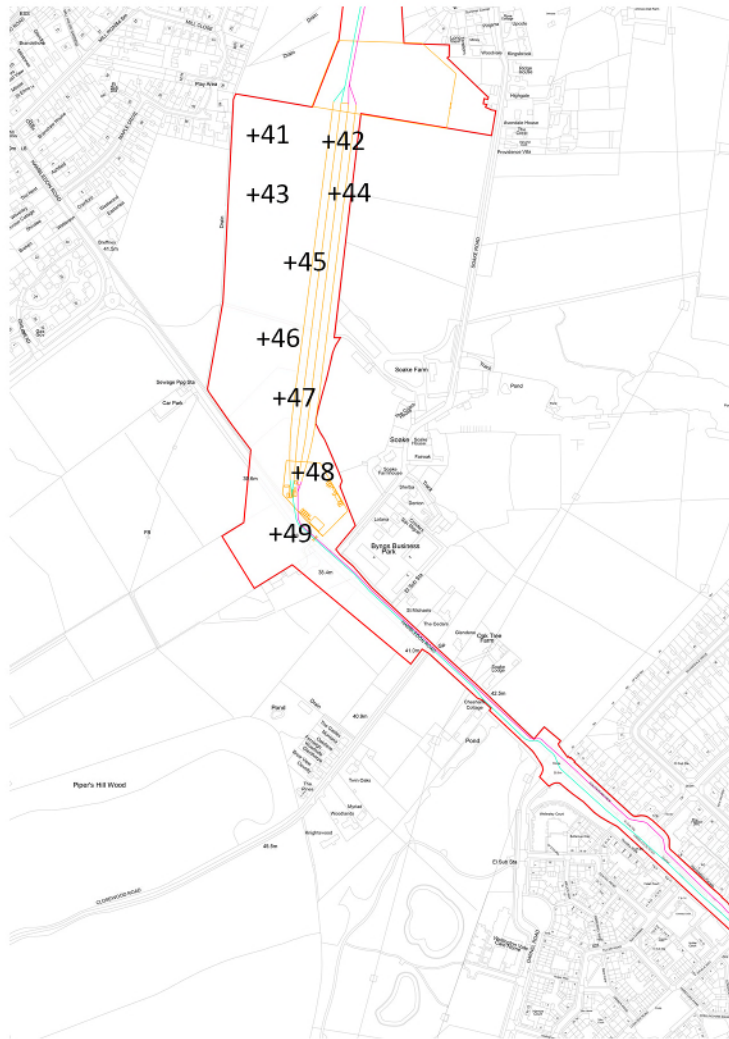
Site: Aquind Interconnector

Client: Aquind Ltd

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- Survey Area
- +1 Auger Observation
- .P1 Pit Observation



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Figure 17.1: Observations

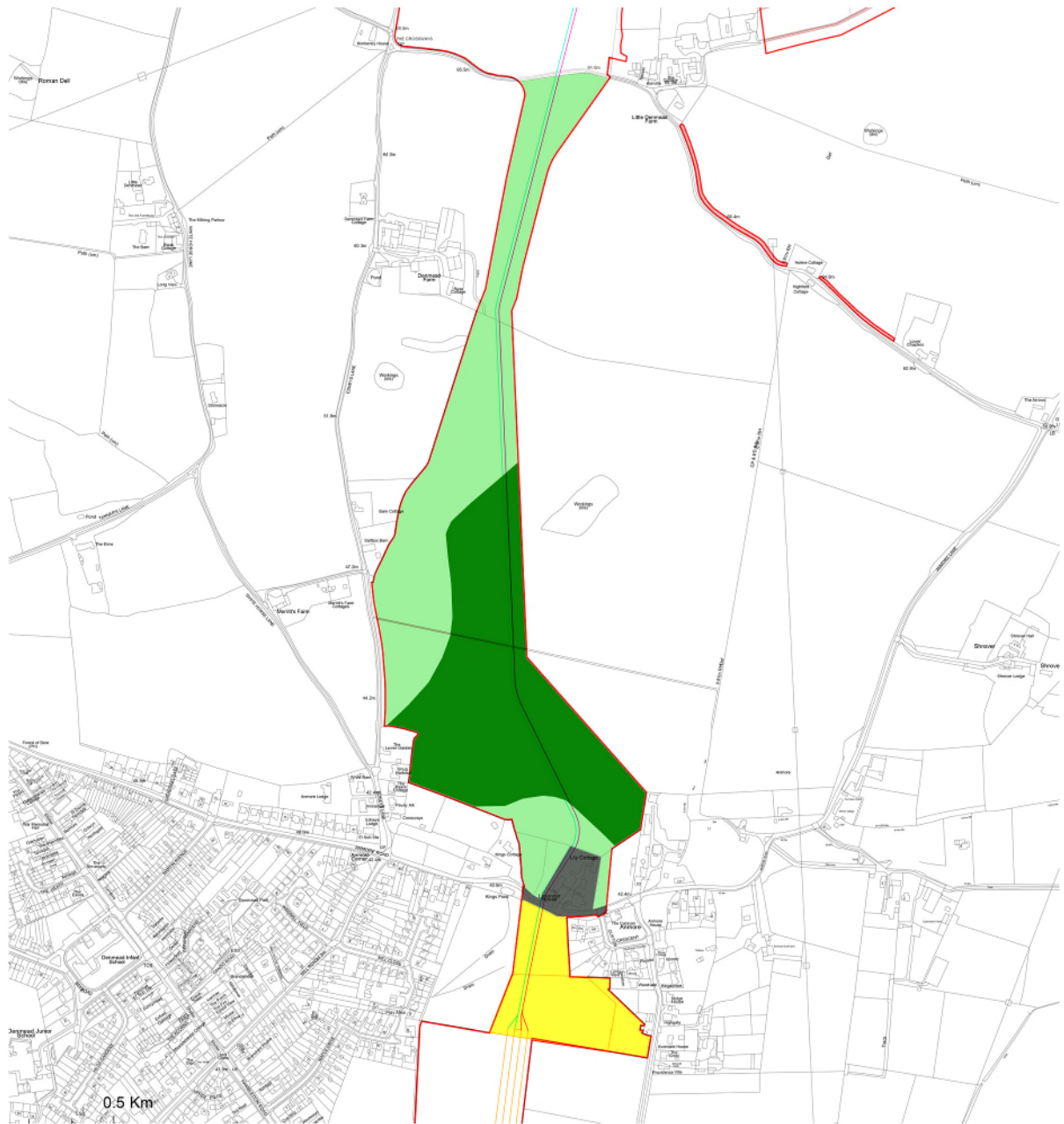
Site: Aquind Interconnector

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- | | | |
|-----------------------------|--------------------------------|--------------------------------|
| Grade 1 - excellent quality | } Best and most versatile land | Subgrade 3b - moderate quality |
| Grade 2 - very good quality | | Grade 4 - poor quality |
| Subgrade 3a - good quality | | Grade 5 - very poor quality |
| Not Present | | Non-agricultural |



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Figure 17.2: Agricultural Land Classification

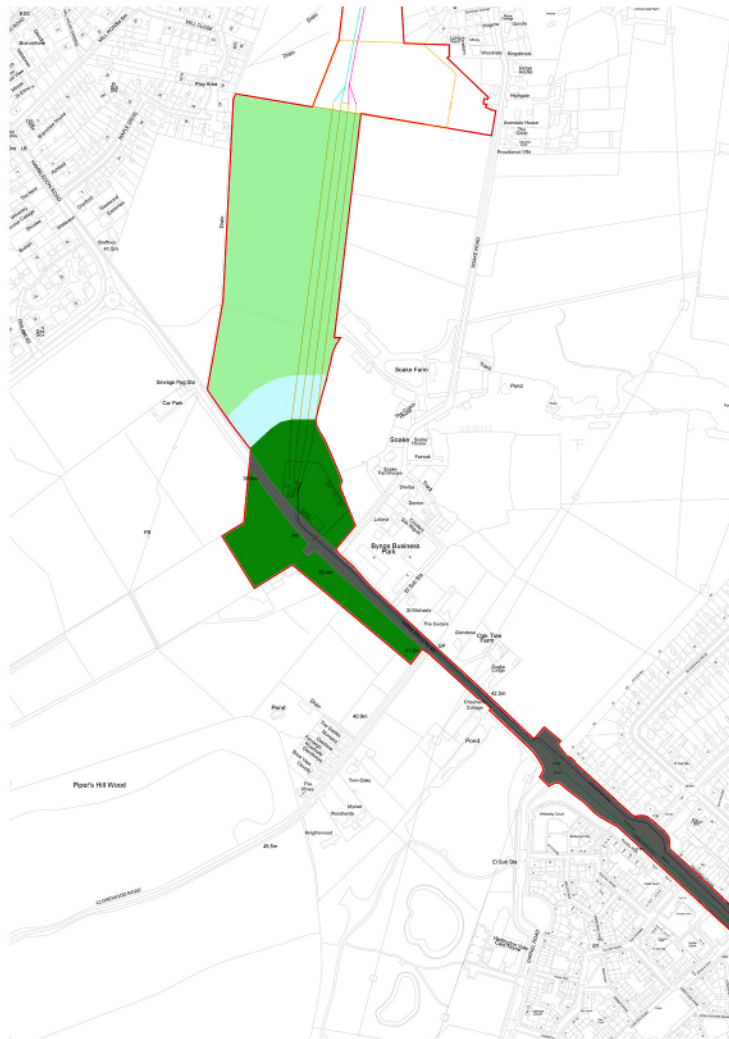
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Figure 17.2: Agricultural Land Classification

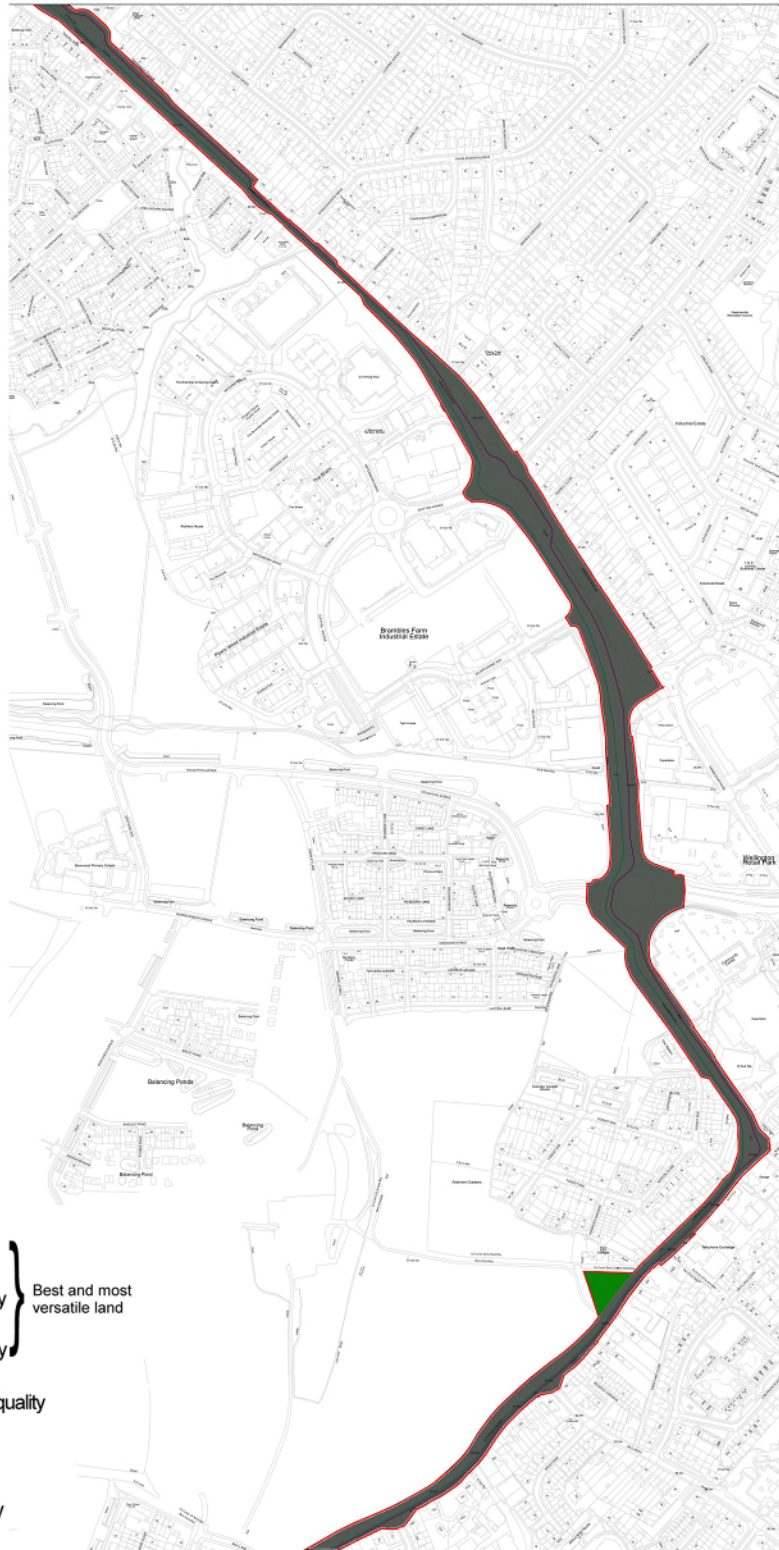
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- Grade 1 - excellent quality
 - Grade 2 - very good quality
 - Subgrade 3a - good quality
 - Subgrade 3b - moderate quality
 - Grade 4 - poor quality
 - Grade 5 - very poor quality
 - Non-agricultural
 - Not Present
- } Best and most versatile land

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Figure 17.2: Agricultural Land Classification

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