

## **Appendix 15A: Agricultural Land Classification Soil Survey Report**



**Aecom Ltd**

**Land at Eggborough,  
Goole, North Yorkshire**

**Agricultural Land Classification  
and  
Soil Resources**



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Reading Agricultural Consultants Ltd

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# 1 Introduction

- 1.1.1 Reading Agricultural Consultants Ltd (RAC) is instructed by Aecom Ltd to investigate the Agricultural Land Classification (ALC) and soil resources of land at Eggborough, by means of a detailed survey of soil and site characteristics.
- 1.1.2 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<sup>1</sup>), and summarised in Natural England's Technical Information Note 049<sup>2</sup>.
- 1.1.3 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.
- 1.1.4 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.
- 1.1.5 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 a mix of Grade 2 and undifferentiated Grade 3 land. 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 on the same information is available. These are more appropriate for the strategic use originally intended ..."*

- 1.1.6 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

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

<sup>2</sup> **Natural England (2012)**. *Technical Information Note 049 - Agricultural Land Classification: protecting the best and most versatile agricultural land*, Second Edition 19<sup>th</sup> December 2012.

observation density of one boring per hectare. This survey follows the detailed methodology set out in the MAFF guidelines.

## 2 Site and Climatic Conditions

### 2.1 General Features, Land Form and Drainage

2.1.1 The site occupies a corridor of arable agricultural land to the north of Eggborough (Figure RAC7463-1). The site extends for approximately 3km from Eggborough Power plant north across the River Aire and its floodplain, across Mill Field Road, across the A19 north of Burn Lodge Farm, and north-westwards to West Lane.

2.1.2 The site is flat, mostly at 7m – 8m above Ordnance Datum (AOD). The flood storage area associated with the River Aire lies at around 5-6m AOD.

### 2.2 Agro-climatic Conditions

2.2.1 Agro-climatic data for the site have been interpolated from the Meteorological Office's standard 5km grid point data set at a representative altitude of 7m AOD, and are given in Table 1. The site has a moderately warm climate and is moderately dry which results in moderately large moisture deficits. The number of Field Capacity Days is fewer than is typical for lowland England and is considered to be favourable for providing opportunities for agricultural fieldwork.

**Table 1: Local agro-climatic conditions**

Average Annual Rainfall	611 mm
Accumulated Temperatures >0°C	1,407 day°
Field Capacity Days	128 days
Average Moisture Deficit, wheat	109 mm
Average Moisture Deficit, potatoes	101 mm

### 2.3 Soil Parent Material and Soil Type

2.3.1 The British Geological Survey<sup>3</sup> maps the solid geology at the site as that of the Sherwood Sandstone Group, which is a sedimentary bedrock derived from a river environment, and typically consists of red, yellow or brown sand and gravel, along with fine silt and clay deposited by overbank flooding. Superficial deposits of Brighton Sand have been mapped in a thin band in the south of the site as well as along Mill Field Road through the centre of the site. Brighton Sand is a post glacial

<sup>3</sup> **British Geological Survey (2017)**. *Geology of Britain viewer*, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

deposit which comprises yellowish or pale brown sand. To the south of the site superficial deposits of alluvium are mapped which consist of clay, silt, sand and gravel. To the north of the site superficial deposits of the Hemingbrough Glaciolacustrine Formation which consist of clay and silt deposited in a post glacial environment. Typically deposits consist of laminated clays, silts and sands which are pale in colour.

- 2.3.2 The Soil Survey of England and Wales soil association mapping<sup>4</sup> (1:250,000 scale) indicates the presence of four soil associations within the site.
- 2.3.3 In the south, the Newport 1 association is mapped. These soils are developed over glaciofluvial drift, and are deep, well drained sandy and coarse loamy soils, some of which are affected by groundwater. They are mostly within Wetness Classes I and II, and can suffer from summer droughtiness<sup>5</sup>.
- 2.3.4 The floodplain of the River Aire has soils of the Enborne association, which are developed on river alluvium and are deep, stoneless, fine loamy and clayey soils variably affected by groundwater. Most Enborne spoils are seasonally waterlogged (Wetness Classes III and IV).
- 2.3.5 To the north of Mill Field Road, soils of the Sessay association are mapped. These are developed on glaciolacustrine and glaciofluvial drift, and are fine and coarse loamy, often stoneless, permeable soils affected by groundwater. They are also associated with slowly permeable seasonally waterlogged fine loamy over clayey and clayey soils.
- 2.3.6 In the north of the site, there are soils of the Foggathorpe 2 association. These are developed in glaciolacustrine clay and are slowly permeable, seasonally waterlogged, stoneless clayey and fine loamy over clayey soils. The association includes some similar coarse loamy over clayey soils. These soils are seasonally waterlogged (Wetness Classes III and IV), even with underdrainage.

## 3 Agricultural Land Quality

### 3.1 Soil Survey Methods

- 3.1.1 Forty-nine soil profiles were examined using an Edelman (Dutch) auger at an observation density of one per hectare in accordance with the established recommendations for ALC surveys<sup>2</sup>. One observation pit was also excavated to examine subsoil structures. The locations of observations are indicated on Figure

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<sup>4</sup> **Soil Survey of England and Wales (1984).** *1:250,000 scale soil association mapping, Sheet 1 – Soils of Northern England*

<sup>5</sup> **Jarvis RA et al (1984).** *Soils and their Use in Northern England.* Soil Survey of England and Wales Bulletin No. 10.

RAC7463-1. 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.

3.1.2 One soil sample was submitted for laboratory determination of particle size distribution, pH, organic matter content and nutrient contents (P, K, Mg). Results are given in Appendix 1.

3.1.3 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.

3.1.4 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. When a profile is found with significant stoniness, sufficient to prevent penetration of a hand auger, then it is assumed, for the purposes of calculating droughtiness, that similar levels of stoniness continues to the full 1.2m depth considered, unless an observation pit excavated in the vicinity shows otherwise.

## **3.2 Agricultural Land Classification and Site Limitations**

3.2.1 Assessment of quality has been carried out according to the MAFF revised guidelines (1988<sup>1</sup>). Soil profiles have been described according to Hodgson (1997<sup>6</sup>)

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



which is the recognised source for describing soil profiles and characteristics according to the revised ALC guidelines.

- 3.2.2 The main limitations to agricultural land quality are flood risk, and soil wetness and workability which limit most of the land to Subgrades 3a and 3b, with smaller areas of Grades 2 and 4.
- 3.2.3 An area in the centre of the site around Mill Field Road is classified as Grade 2, and there are also isolated Grade 2 (and Grade 1) profiles that has been mapped with the dominant surrounding grade. Profiles assessed as Grade 2 typically consist of sandy loam or sandy clay loam topsoils which are dark grey or dark greyish brown (10YR4/1 or 10YR4/2 in the Munsell soil colour charts<sup>7</sup>). These lie over an upper subsoil of brown or greyish brown (10YR5/3 or 10YR5/2) sandy loam or sandy clay loam with some loamy sand. The lower subsoil is either a sandy loam, sandy clay or clay, and is typically mottled showing few to many medium distinct ochreous mottles. The profiles are very slightly stony, typically at 2% stone content. These profiles are generally limited slightly by both a droughtiness and wetness limitation to Grade 2.
- 3.2.4 The area classified as Subgrade 3a to the north of Mill Field Lane and east of the A19 contains highly variable soil profiles, with individual and isolated profiles within this area also classified as Grades 2 and 3b. All this area is identified by the Environment Agency as Flood Zone 3, where there is a 1 in 100 or greater annual probability of river flooding (>1%), or a 1 in 200 or greater annual probability of flooding from the sea (>0.5%) in any year<sup>8</sup>. The ALC guidelines predate the Environment Agency mapping and do not present the risk from flooding according to the same criteria, but instead consider the frequency, duration and timing of flooding. However, the guidelines acknowledge that information on flooding at a local scale is often fragmentary and the assessment may have to be based on local knowledge but that most weight should be given to the predicted long-term risk or the return periods used in the design of flood protection schemes. For this reason, areas shown within Flood Zone 3 have been limited to Subgrade 3a.
- 3.2.5 The soil profiles within this area are variable but the topsoil textures are mostly sandy clay loams, with some sandy loams and clay, and are typically dark grey (10YR4/1) in colour. The upper subsoil also varies across the area and includes sandy clay loam, sandy clay, heavy clay loam, sandy loam and loamy sand. The lower subsoil is also variable, ranging from grey clays and silty clays to greyish brown sandy loams and yellowish red sands.
- 3.2.6 Soils classified as Subgrade 3b occur in two main areas, to the south of the River Aire and to the west of the A19. There are also two smaller patches of Subgrade 3b identified in the centre of the site. The area to the south of the River Aire is the

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<sup>7</sup> **Munsell Color (2009)**. *Munsell Soil Color Book*, Grand Rapids, MI, USA

<sup>8</sup> **Environment Agency (2017)**. *Flood Map for Planning (Rivers and Sea)* <http://maps.environment-agency.gov.uk>

flood storage area associated with the River Aire and, given that it lies at least 2m lower than the modelled flood water levels for the River Aire, as confirmed by discussions with farmers, and that there are clear signs of crop damage, it can be classified as no higher than Subgrade 3b. In general, the soils in this area comprise dark grey or dark greyish brown medium or heavy silty clay loam topsoils, with occasional silty clays and sandy clay loams. These lie over greyish brown medium or heavy silty clay loam subsoils, with some silty clays, fine sandy clay loams, sandy silt loams and clay loams.

- 3.2.7 The area of Subgrade 3b to the west of the A19 is limited by soil wetness and workability. These profiles typically consist of grey or dark greyish brown clay or heavy clay loam topsoil, over a brown or greyish brown clay or heavy clay loam upper subsoil and a grey clay lower subsoil. Profiles are typically gleyed within 40cm with many medium prominent ochreous mottles in the upper subsoil which is also slowly permeable. These profiles are assessed as Wetness Class III which combined with clay or heavy clay loam topsoil textures and 128 Field Capacity Days (FCDs) classifies them as Subgrade 3b.
- 3.2.8 The area identified as Grade 4 is found within a meander of the River Aire. The soil profiles were severely waterlogged at the time of survey. Topsoil texture consists of black organic silty clay loam over a black organic sandy silt loam. The severe waterlogging places these profiles in Wetness Class V and classifies them as Grade 4. portion of the site limited more severely by flood risk to Grade 4.
- 3.2.9 The approximate areas of each ALC grade are given in Table 2 and are shown in Figure RAC7463-2.

**Table 2: ALC Areas**

<b>Grade</b>	<b>Description</b>	<b>Area (ha)</b>	<b>% of agric. land</b>
2	Very good quality	7	12
3a	Good quality	16	27
3b	Moderate quality	33	55
4	Poor quality	4	6
	Total Agricultural	60	100

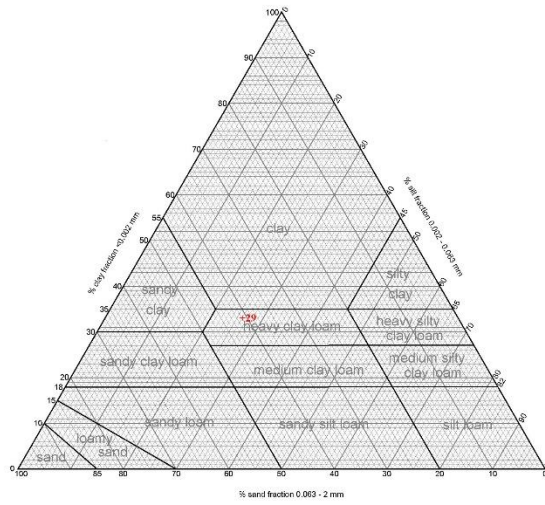
Note: approximate areas only given, depending on width of corridor included

## Appendix 1: Laboratory Data

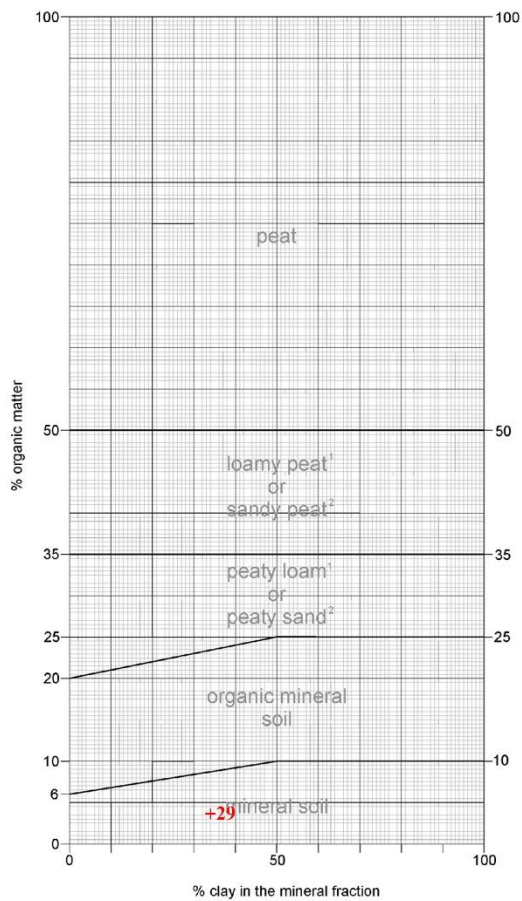
<b>Determinand</b>	<b>Profile 29</b>	<b>Units</b>
Sand 2.00-0.063 mm	39	% w/w
Silt 0.063-0.002 mm	27	%w/w
Clay <0.002 mm	34	% w/w
Organic Matter WB	3.9	% w/w
Texture	Heavy Clay Loam	% w/w

<b>Determinand</b>	<b>Profile 29</b>	<b>Units</b>
Soil pH	7.1	
Phosphorus (P)	14.0 (1)	mg/l (av)
Potassium (K)	106 (1)	mg/l (av)
Magnesium (Mg)	350 (5)	mg/l (av)

# Soil Texture by Particle Size Analysis



## Organic Matter Class



<sup>1</sup> Less than 50% sand in the mineral fraction

<sup>2</sup> 50% sand or more in the mineral fraction

## Appendix 2: Soil Profile Summaries and Droughtiness Calculations

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

		MDw= 109				MDp= 101											
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	Wheat Calculation			Potato Calculation			Gley	SP	WC	Wetness Grade	Overall Grade	
						TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm						
1	0	30	SL	10YR3/2	2	1	17	50.0	1	17	50.0	n	n	I	1	3b	
	30	50	LS	10YR4/3	2	1	9	17.7	1	9	17.7	n	n			flood risk	
	50	70	LS	10YR4/3	2	0.5	6	11.8	1	9	17.7	n	n				
	70	80	LS	10YR4/3	2	0.5	6	5.9	1	9	8.8	n	n				
	80	120	LS	10YR5/3	mmd och	2	0.5	6	23.6				y	n			
								Total (mm) =	109.0			Total (mm) =	94.2				
								MBw=	0.0			MBp=	-6.8				
								Grade =	3a			Grade =	2				
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	Wheat Calculation			Potato Calculation			Gley	SP	WC	Wetness Grade	Overall Grade	
						TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm						
2	0	30	ZC	10YR4/1	fff och	2	1	17	50.0	1	17	50.0	n	n	III	3b	3b
	30	50	ZC	2.5Y5/1	mmp och	2	1	12	23.6	1	12	23.6	y	y			
	50	70	ZC	2.5Y5/1	mmp och	2	0.5	7	13.7	1	12	23.6	y	y			
	70	90	ZC	2.5Y5/1	mmp och	2	0.5	7	13.7	1	12	23.6	y	y			
	90	120	ZCL	10YR4/1		2	0.5	10	29.4				y	n			
								Total (mm) =	130.5			Total (mm) =	120.7				
								MBw=	21.5			MBp=	19.7				
								Grade =	2			Grade =	1				
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	Wheat Calculation			Potato Calculation			Gley	SP	WC	Wetness Grade	Overall Grade	
						TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm						
3	0	30	ZCL	10YR4/1	fff och	2	1	19	55.9	1	19	55.9	n	n	III	3a	3b
	30	50	ZC	10YR4/2	mmp och	2	1	12	23.6	1	12	23.6	y	y			flood risk
	50	70	ZC	10YR4/2	mmp och	2	0.5	7	13.7	1	12	23.6	y	y			
	70	120	ZC	10YR4/2	mmp och	2	0.5	7	34.4				y	y			
								Total (mm) =	127.6			Total (mm) =	103.0				

Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	Wheat Calculation			Potato Calculation			Gley	SP	WC	Wetness Grade	Overall Grade			
						TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm								
4	0	35	hZCL	10YR4/1	2	1	19	65.2	1	19	65.2	n	n	II	3a	3b			
	35	50	mZCL	2.5Y4/3	mfd och	2	1	17	25.0	1	17	25.0	y	n		flood risk			
	50	70	mZCL	2.5Y4/3	mfd och	2	0.5	10	19.6	1	17	33.4	y	n					
	70	120	mZCL	2.5Y4/3	mfd och	2	0.5	10	49.1				y	n					
Total (mm) =								158.9	Total (mm) =								123.6		
MBw=						49.9	MBp=						22.6						
Grade =						1	Grade =						1						
5	0	50	ZC	10YR4/1	2	1	17	83.4	1	17	83.4	n	n	I	3a	3b			
	50	70	hZCL	10YR4/2	mmd och	2	0.5	10	19.6	1	17	33.4	y	n		flood risk			
	70	120	hZCL	10YR4/2	mmd och	2	0.5	10	49.1				y	n					
	Total (mm) =								152.1	Total (mm) =								116.8	
MBw=						43.1	MBp=						15.8						
Grade =						1	Grade =						1						
6	0	50	hZCL	10YR4/1	2	1	19	93.2	1	19	93.2	n	n	I	2	3b			
	50	70	mZCL	10YR4/2	mmd och	2	0.5	10	19.6	1	17	33.4	y	n		flood risk			
	70	120	mZCL	10YR4/2	mmd och	2	0.5	10	49.1				y	n					
	Total (mm) =								161.9	Total (mm) =								126.6	
MBw=						52.9	MBp=						25.6						
Grade =						1	Grade =						1						
7	0	43	cSL	10YR4/1	2	1	17	71.7	1	17	71.7	n	n	I	1	1			
	43	50	cSL	10YR4/4	fcd och	2	1	16	11.0	1	16	11.0	y	n					
	50	70	cSL	10YR4/4	fcd och	2	0.5	11	21.6	1	16	31.4	y	n					



Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade		
11	0	45	C	10YR4/2		2	1	17	75.1	1	17	75.1	n	n	II	3b	3b	
	45	50	hCL	10YR4/1	mmd och	2	1	16	7.9	1	16	7.9	y	n				
	50	70	hCL	10YR4/1	mmd och	2	0.5	10	19.6	1	16	31.4	y	n				
	70	120	hCL	10YR4/1	mmd och	2	0.5	10	49.1				y	y				
								Total (mm) =	151.6			Total (mm) =	114.3					
								MBw=	42.6			MBp=	13.3					
								Grade =	1			Grade =	1					
								Wheat Calculation				Potato Calculation						
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade		
12	0	40	ZCL	Black		2	1	19	74.6	1	19	74.6	y	n	V Organic /marsh	4	4	
	40	50	SZL	Black		2	1	17	16.7	1	17	16.7	y	n				
	50	70	SZL	Black		2	0.5	11	21.6	1	17	33.4	y	n				
	70	120	SZL	Black		2	0.5	11	54.0				y	n				
								Total (mm) =	166.8			Total (mm) =	124.6					
								MBw=	57.8			MBp=	23.6					
								Grade =	1			Grade =	1					
								Wheat Calculation				Potato Calculation						
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade		
13	0	35	ZCL	Black		2	1	19	65.2	1	19	65.2	y	n	V Organic marsh	4	4	
	35	50	SZL	Black		2	1	17	25.0	1	17	25.0	y	n				
	50	70	SZL	Black		2	0.5	11	21.6	1	17	33.4	y	n				
	70	120	SZL	Black		2	0.5	11	54.0				y	n				
								Total (mm) =	165.8			Total (mm) =	123.6					
								MBw=	56.8			MBp=	22.6					
								Grade =	1			Grade =	1					
								Wheat Calculation				Potato Calculation						
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade		
14	0	35	ZCL	Black		2	1	19	65.2	1	19	65.2	y	n	V Organic /marsh	4	4	
	35	50	SZL	Black		2	1	17	25.0	1	17	25.0	y	n				
	50	70	SZL	Black		2	0.5	11	21.6	1	17	33.4	y	n				
	70	120	SZL	Black		2	0.5	11	54.0				y	n				



Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	Wheat Calculation			Potato Calculation			Gley	SP	WC	Wetness Grade	Overall Grade	
						TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm						
						Total (mm) =	165.8							Total (mm) =	123.6		
						MBw=	56.8							MBp=	22.6		
						Grade =	1							Grade =	1		
						Wheat Calculation			Potato Calculation								
15	0	40	ZCL	Black	2	1	19	74.6	1	19	74.6	y	n	V organic /marsh	4	4	
	40	50	SZL	Black	2	1	17	16.7	1	17	16.7	y	n				
	50	70	SZL	Black	2	0.5	11	21.6	1	17	33.4	y	n				
	70	120	SZL	Black	2	0.5	11	54.0				y	n				
						Total (mm) =	166.8							Total (mm) =	124.6		
						MBw=	57.8							MBp=	23.6		
						Grade =	1							Grade =	1		
						Wheat Calculation			Potato Calculation								
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade	
16	0	35	SCL	10YR4/1	2	1	17	58.4	1	17	58.4	n	n	III	3a	3a	
	35	50	hCL	10YR4/2	mmd och	2	1	16	23.6	1	23.6	y	y				
	50	70	hCL	10YR4/2	mmd och	2	0.5	10	19.6	1	31.4	y	y				
	70	120	hCL	10YR4/2	mmd och	2	0.5	10	49.1			y	y				
						Total (mm) =	150.6							Total (mm) =	113.3		
						MBw=	41.6							MBp=	12.3		
						Grade =	1							Grade =	1		
						Wheat Calculation			Potato Calculation								
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade	
17	0	40	SCL	10YR4/1	fff och	2	1	17	66.7	1	66.7	n	n	II	2	2	
	40	50	SCL	10YR4/2	mmp och	2	1	15	14.7	1	14.7	y	n				
	50	70	SCL	10YR4/2	mmp och	2	0.5	10	19.6	1	29.4	y	n				
	70	80	SCL	10YR4/2	mmp och	2	0.5	10	9.8			y	n				
	80	120	ZC	10YR5/1	mmd och	2	0.5	7	27.5			y	y				
						Total (mm) =	138.4							Total (mm) =	110.9		
						MBw=	29.4							MBp=	9.9		
						Grade =	2							Grade =	2		
						Wheat Calculation			Potato Calculation								

Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade			
18	0	35	SCL	10YR4/1	fff och	2	1	17	58.4	1	17	58.4	n	n	III	3a	3a		
	35	50	C	10YR5/1	mmp och	2	1	13	19.1	1	13	19.1	y	y					
	50	65	SL	10YR5/3	mmp och	2	1	15	22.1	1	15	22.1	y	n					
	65	70	SL	10YR4/2	mmp och	2	0.5	11	5.4	1	15	7.4	y	n					
	70	90	SL	10YR4/2	mmp och	2	0.5	11	21.6				y	n					
	90	120	C	10YR5/1	mmd och	2	0.5	7	20.6				y	y					
								Total (mm) =	147.2			Total (mm) =	107.0						
								MBw=	38.2			MBp=	6.0						
								Grade =	1			Grade =	2						
								Wheat Calculation				Potato Calculation							
19	0	50	ZC	10YR4/1	fff och	2	1	17	83.4	1	17	83.4	n	n	III	3b	3b		
	50	70	C	10YR5/2	mmd och	2	0.5	13	25.5	1	13	25.5	y	y					
	70	120	C	10YR5/2	mmd och	2	0.5	7	34.4				y	y					
								Total (mm) =	143.3			Total (mm) =	108.9						
								MBw=	34.3			MBp=	7.9						
								Grade =	1			Grade =	2						
								Wheat Calculation				Potato Calculation							
20	0	30	C	10YR4/1	fff och	2	1	17	50.0	1	17	50.0	n	n	III	3b	3b		
	30	50	C	10YR4/1	mmp och	2	1	13	25.5	1	13	25.5	y	y					
	50	70	C	10YR5/2	mmp och	2	0.5	7	13.7	1	13	25.5	y	y					
	70	120	C	10YR5/2	mmp och	2	0.5	7	34.4				y	y					
								Total (mm) =	123.7			Total (mm) =	101.1						
								MBw=	14.7			MBp=	0.1						
								Grade =	2			Grade =	2						
								Wheat Calculation				Potato Calculation							
21	0	30	SL	10YR4/1	fff och	2	1	17	50.0	1	17	50.0	n	n	III	2	2		
	30	50	SL	10YR4/1	fff och	2	1	15	29.4	1	15	29.4	y	n					
	50	70	C	10YR4/1	mmp och	2	0.5	7	13.7	1	13	25.5	y	y					

	70	120	C	10YR4/1	mmp och	2	0.5	7	34.4			y	y	v.wet		
								Total (mm) =	127.6		Total (mm) =	105.0				
								MBw=	18.6		MBp=	4.0				
								Grade =	2		Grade =	2				
								Wheat Calculation				Potato Calculation				
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade
22	0	20	SL	10YR4/1	fff och	2	1	17	33.4	1	17	33.4	n	n	III	2
	20	50	SC	10YR5/2	mmd och	2	1	15	44.2	1	15	44.2	y	y		
	50	70	SC	10YR5/2	mmd och	2	0.5	7	13.7	1	13	25.5	y	y		
	70	120	SC	10YR5/2	mmd och	2	0.5	7	34.4				y	y	v.wet	
								Total (mm) =	125.6		Total (mm) =	103.0				
								MBw=	16.6		MBp=	2.0				
								Grade =	2		Grade =	2				
								Wheat Calculation				Potato Calculation				
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade
23	0	30	SL	10YR4/1	fff och	2	1	17	50.0	1	17	50.0	n	n	I	1
	30	50	SL	10YR5/3	mmd och	2	1	15	29.4	1	15	29.4	y	n		
	50	70	SL	10YR5/3	mmd och	2	0.5	11	21.6	1	11	21.6	y	n		
	70	120	SL	10YR5/3	mmd och	2	0.5	11	54.0				y	n		
								Total (mm) =	155.0		Total (mm) =	101.1				
								MBw=	46.0		MBp=	0.1				
								Grade =	1		Grade =	2				
								Wheat Calculation				Potato Calculation				
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade
24	0	30	SL	10YR4/1	fff och	2	1	17	50.0	1	17	50.0	n	n	I	1
	30	50	SL	10YR4/3	mmd och	2	1	15	29.4	1	15	29.4	y	n		
	50	70	SL	10YR4/3	mmd och	2	0.5	11	21.6	1	11	21.6	y	n		
	70	120	SL	10YR5/2	mmd och	2	0.5	11	54.0				y	n		
								Total (mm) =	155.0		Total (mm) =	101.1				
								MBw=	46.0		MBp=	0.1				
								Grade =	1		Grade =	2				
								Wheat Calculation				Potato Calculation				

Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade			
25	0	30	hCL	10YR4/2	fff och	2	1	18	53.0	1	18	53.0	n	n	III	3b	3b		
	30	50	C	10YR5/3	mmp och	2	1	13	25.5	1	13	25.5	y	y					
	50	70	C	10YR5/3	mmp och	2	0.5	7	13.7	1	13	25.5	y	y					
	70	120	C	10YR5/1	mmp och	2	0.5	7	34.4				y	y					
								Total (mm) =	126.6			Total (mm) =	104.0						
								MBw=	17.6			MBp=	3.0						
								Grade =	2			Grade =	2						
								Wheat Calculation				Potato Calculation							
26	0	27	hCL	10YR4/2	fff och	2	1	18	47.7	1	18	47.7	n	n	III	3b	3b		
	27	50	C	10YR5/3	mmp och	2	1	13	29.3	1	13	29.3	y	y					
	50	57	C	10YR5/3	mmp och	2	1	13	8.9	1	13	8.9	y	y					
	57	70	cSL	10YR5/3	mmp och	2	0.5	11	14.0	1	16	20.4	y	n					
	70	120	C	10YR5/1	mmp och	2	0.5	7	34.4				y	y					
								Total (mm) =	134.3			Total (mm) =	106.4						
								MBw=	25.3			MBp=	5.4						
								Grade =	2			Grade =	2						
								Wheat Calculation				Potato Calculation							
27	0	40	hCL	10YR4/2	fff och	2	1	18	70.6	1	18	70.6	n	n	III	3b	3b		
	40	50	SL	10YR5/3	mmp och	2	1	16	15.7	1	16	15.7	y	n					
	50	60	SL	10YR5/3	mmp och	2	1	11	10.8	1	16	15.7	y	n					
	60	70	C	10YR5/3	mmp och	2	0.5	7	6.9	1	13	12.8	y	y					
	70	120	C	10YR5/1	mmp och	2	0.5	7	34.4				y	y					
								Total (mm) =	138.4			Total (mm) =	114.8						
								MBw=	29.4			MBp=	13.8						
								Grade =	2			Grade =	1						
								Wheat Calculation				Potato Calculation							
28	0	20	hCL	10YR4/2	fff och	2	1	18	35.3	1	18	35.3	n	n	III	3b	3b		
	20	30	C	10YR4/2	mmp och	2	1	15	14.7	1	15	14.7	y	n					

30	50	SL	10YR4/2	mmp och	2	1	11	21.6	1	16	31.4	y	n
50	70	C	10YR5/3	mmp och	2	0.5	7	13.7	1	13	25.5	y	y
70	120	C	10YR5/3	mmp och	2	0.5	7	34.4				y	y
								Total (mm) =	119.7			Total (mm) =	107.0
								MBw=	10.7			MBp=	6.0
								Grade =	2			Grade =	2

Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	Wheat Calculation			Potato Calculation			Gley	SP	WC	Wetness Grade	Overall Grade	
						TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm						
29	0	30	hCL	10YR4/2	fmd och	2	1	18	53.0	1	18	53.0	n	n	III	3b	3b
	30	50	C	10YR4/2	mcp och	2	1	13	25.5	1	13	25.5	y	y			
	50	70	C	10YR4/2	mmp och	2	1	7	13.8	1	13	25.5	y	y			
	70	80	C	10YR5/3	mmp och	2	0.5	7	6.9				y	y			
	80	120	ZCL	10YR5/3	mmf och	2	0.5	7	27.5				y	y			
								Total (mm) =	126.6			Total (mm) =	104.0				
								MBw=	17.6			MBp=	3.0				
								Grade =	2			Grade =	2				

Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	Wheat Calculation			Potato Calculation			Gley	SP	WC	Wetness Grade	Overall Grade	
						TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm						
30	0	30	C	10YR4/2	mmd och	2	1	17	50.0	1	17	50.0	n	n	III	3b	3b
	30	50	C	10YR5/3	cmp och	2	1	13	25.5	1	13	25.5	y	y			
	50	70	C	10YR5/3	cmp och	2	1	7	13.8	1	13	25.5	y	y			
	70	120	C	10YR5/3	cmp och	2	0.5	7	34.4				y	y			
								Total (mm) =	123.7			Total (mm) =	101.1				
								MBw=	14.7			MBp=	0.1				
								Grade =	2			Grade =	2				

Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	Wheat Calculation			Potato Calculation			Gley	SP	WC	Wetness Grade	Overall Grade	
						TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm						
31	0	30	SCL	10YR4/1	fff och	2	1	17	50.0	1	17	50.0	n	n	III	3a	3a
	30	50	SL	10YR4/2	mff och	2	1	15	29.4	1	15	29.4	y	y			
	50	55	SL	10YR4/2	mff och	2	1	11	5.4	1	15	7.4	y	y			
	55	70	C	10YR5/3	mmd och	2	1	7	10.3	1	13	19.1	y	y			
	70	120	C	10YR5/3	mmd och	2	0.5	7	34.4				y	y			
								Total (mm) =	129.6			Total (mm) =	106.0				

Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	Wheat Calculation			Potato Calculation			Gley	SP	WC	Wetness Grade	Overall Grade	
						TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm						
						MBw=	20.6							MBp=	5.0		
						Grade =	2							Grade =	2		
32	0	30	SL	10YR4/1	2	1	17	50.0	1	17	50.0	n	n	I	1	1	
	30	50	SL	10YR5/3	mmd och	2	1	16	31.4	1	16	y	n				
	50	65	SL	10YR5/3	mmd och	2	1	11	16.2	1	16	y	n				
	65	70	SL	10YR5/1	fcp och	2	1	11	5.4	1	16	y	n				
	70	120	SL	10YR5/1	fcp och	2	0.5	11	54.0			y	n				
						Total (mm) =	157.0							Total (mm) =	112.8		
						MBw=	48.0							MBp=	11.8		
						Grade =	1							Grade =	1		
						Wheat Calculation			Potato Calculation								
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade	
33	0	40	SL	10YR4/2	2	1	17	66.7	1	17	66.7	n	n	I	1	3b	
	40	50	LS	10YR5/3	2	1	9	8.8	1	9	8.8	n	n			flood risk	
	50	70	LS	10YR5/3	2	1	6	11.8	1	9	17.7	n	n				
	70	80	LS	10YR5/3	2	1	6	5.9				n	n				
	80	120	SC	10YR5/3	2	0.5	8	31.4				n	n				
						Total (mm) =	124.7							Total (mm) =	93.2		
						MBw=	15.7							MBp=	-7.8		
						Grade =	2							Grade =	2		
						Wheat Calculation			Potato Calculation								
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade	
34	0	40	SL	10YR4/2	2	1	17	66.7	1	17	66.7	n	n	I	1	3b	
	40	50	SCL	10YR5/4	fmd och	2	1	15	14.7	1	10	y	n			flood risk	
	50	70	SCL	10YR5/4	fmd och	2	1	10	19.6	1	10	y	n				
	70	120	SCL	10YR5/4	fmd och	2	0.5	10	49.1			y	n				
						Total (mm) =	150.1							Total (mm) =	96.2		
						MBw=	41.1							MBp=	-4.8		
						Grade =	1							Grade =	2		
						Wheat Calculation			Potato Calculation								

Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade	
35	0	40	SL	10YR4/2		2	1	17	66.7	1	17	66.7	n	n	II	1	3b
	40	50	LS	10YR5/4		2	1	9	8.8	1	9	8.8	n	n			flood risk
	50	70	LS	10YR5/4		2	1	6	11.8	1	9	17.7	n	n			
	70	80	LS	10YR5/4	cmd och	2	1	6	5.9				y	n			
	80	120	C	10YR5/3	cmd och	2	0.5	7	27.5				y	y			
								Total (mm) =	120.7		Total (mm) =	93.2					
								MBw=	11.7		MBp=	-7.8					
								Grade =	2		Grade =	2					
								Wheat Calculation				Potato Calculation					
36	0	40	ZC	10YR4/2		2	1	17	66.7	1	17	66.7	n	n	II	3b	3b
	40	50	fSCL	10YR5/2	mff och	2	1	15	14.7	1	15	14.7	y	n			flood risk
	50	70	fSCL	10YR5/2	mff och	2	1	10	19.6	1	15	29.4	y	n			
	70	120	fSCL	10YR5/2	mff och	2	0.5	10	49.1				y	n			
									Total (mm) =	150.1		Total (mm) =	110.9				
								MBw=	41.1		MBp=	9.9					
								Grade =	1		Grade =	2					
								Wheat Calculation				Potato Calculation					
37	0	49	hZCL	10YR4/2		2	1	19	91.3	1	19	91.3	n	n	I	2	3b
	49	50	SCL	10YR5/2	mff och	2	1	15	1.5	1	15	1.5	y	n			flood risk
	50	70	SCL	10YR5/2	mff och	2	1	10	19.6	1	15	29.4	y	n			
	70	120	SCL	10YR5/2	mff och	2	0.5	10	49.1				y	n			
									Total (mm) =	161.5		Total (mm) =	122.2				
								MBw=	52.5		MBp=	21.2					
								Grade =	1		Grade =	1					
								Wheat Calculation				Potato Calculation					
38	0	40	mZCL	10YR4/2		2	1	19	74.6	1	19	74.6	n	n	II	2	3b
	40	50	hZCL	10YR5/2	mfd och	2	1	17	16.7	1	17	16.7	y	n			flood risk
	50	70	hZCL	10YR5/2	mfd och	2	1	10	19.6	1	17	33.4	y	n			

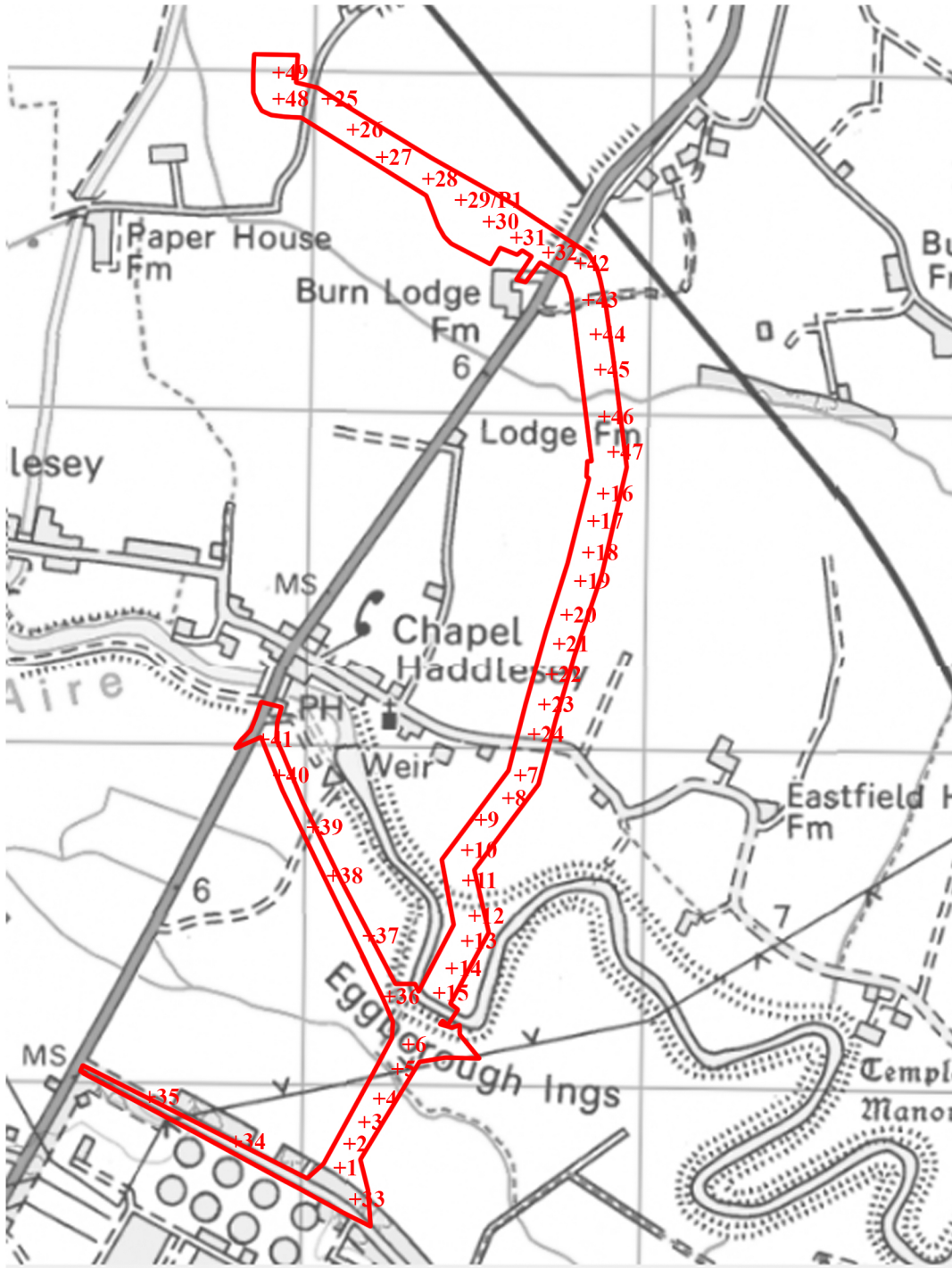
	70	120	hZCL	10YR5/2	mfd och	2	0.5	10	49.1			y	n			
								Total (mm) =	159.9		Total (mm) =	124.6				
								MBw=	50.9		MBp=	23.6				
								Grade =	1		Grade =	1				
								Wheat Calculation			Potato Calculation					
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Grade
39	0	40	mZCL	10YR4/2	2	1	19	74.6	1	19	74.6	n	n	I	2	3b
	40	50	hSZL	10YR5/2	2	1	17	16.7	1	17	16.7	y	n			flood risk
	50	70	hSZL	10YR5/2	2	1	11	21.6	1	17	33.4	y	n			
	70	120	hSZL	10YR5/2	2	0.5	11	54.0				y	n			
								Total (mm) =	166.8		Total (mm) =	124.6				
								MBw=	57.8		MBp=	23.6				
								Grade =	1		Grade =	1				
								Wheat Calculation			Potato Calculation					
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade
40	0	30	hZCL	10YR4/2	2	1	19	55.9	1	19	55.9	n	n	II	3a	3b
	30	50	hCL	10YR5/3	2	1	17	33.4	1	17	33.4	y	n			flood risk
	50	70	hCL	10YR5/3	2	1	11	21.6	1	17	33.4	y	n			
	70	120	cLS	10YR5/2	2	0.5	11	54.0				y	n			
								Total (mm) =	164.8		Total (mm) =	122.6				
								MBw=	55.8		MBp=	21.6				
								Grade =	1		Grade =	1				
								Wheat Calculation			Potato Calculation					
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade
41	0	40	SCL	10YR4/2	2	1	17	66.7	1	17	66.7	n	n	I	1	3b
	40	50	mCL	10YR5/2	2	1	16	15.7	1	16	15.7	n	n			flood risk
	50	70	mCL	10YR5/2	2	1	10	19.6	1	16	31.4	n	n			
	70	120	mCL	10YR5/2	2	0.5	10	49.1				n	n			
								Total (mm) =	151.1		Total (mm) =	113.8				
								MBw=	42.1		MBp=	12.8				
								Grade =	1		Grade =	1				
								Wheat Calculation			Potato Calculation					



Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade			
42	0	30	SL	10YR3/2	2	1	17	50.0	1	17	50.0	n	n	I	1	3a			
	30	50	LS	10YR5/3	2	1	9	17.7	1	9	17.7	n	n						
	50	70	S	5YR5/8	2	1	5	9.8	1	7	13.8	n	n						
	70	120	S	5YR5/8	2	0.5	5	24.6				n	n						
								Total (mm) =		Total (mm) =	81.5								
								MBw=	-6.9	MBp=	-19.5								
								Grade =	3a	Grade =	3a								
								Wheat Calculation				Potato Calculation							
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade			
43	0	44	SL	10YR3/2	2	1	17	73.4	1	17	73.4	n	n	I	1	2			
	44	50	LS	10YR5/3	fmp och	2	1	9	5.3	1	9	n	n						
	50	60	LS	10YR5/3	fmp och	2	1	6	5.9	1	9	n	n						
	60	70	S	5YR5/8		2	1	5	4.9	1	7	n	n						
	70	120	S	5YR5/8		2	0.5	5	24.6				n	n					
								Total (mm) =	114.1	Total (mm) =	94.4								
								MBw=	5.1	MBp=	-6.6								
								Grade =	2	Grade =	2								
								Wheat Calculation				Potato Calculation							
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade			
44	0	40	SCL	10YR4/2	2	1	17	66.7	1	17	66.7	n	n	I	1	3a			
	40	50	SCL	10YR5/3	mmd och	2	1	15	14.7	1	15	n	n			flood risk			
	50	70	SCL	10YR5/3	mmd och	2	1	10	19.6	1	10	n	n						
	70	120	SL	5YR5/1	mmd och	2	0.5	5	24.6				n	n					
								Total (mm) =	125.6	Total (mm) =	101.1								
								MBw=	16.6	MBp=	0.1								
								Grade =	2	Grade =	2								
								Wheat Calculation				Potato Calculation							
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade			
45	0	49	SCL	10YR4/2	och/femns	2	1	17	81.7	1	17	n	n	I	1	3a			
	49	50	SL	10YR5/2	mmd och	2	1	15	1.5	1	15	y	n			flood risk			
	50	70	SL	10YR5/2	mmd och	2	1	11	21.6	1	15	y	n						

	70	120	SL	10YR5/2	mmd och	2	0.5	11	54.0			y	n				
								Total (mm) =	158.8		Total (mm) =	112.6					
								MBw=	49.8		MBp=	11.6					
								Grade =	1		Grade =	1					
								Wheat Calculation			Potato Calculation						
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade	
46	0	30	C	10YR4/2	2	1	17	50.0	1	17	50.0	n	n	II	3b	3b	
	30	50	SC	10YR5/3	mfd och	2	1	15	29.4	1	15	29.4	y	n			
	50	70	SCL	10YR5/2	mmd grey	2	1	10	19.6	1	15	29.4	y	n			
	70	120	SCL	10YR5/2	mmd grey	2	0.5	10	49.1				y	n			
								Total (mm) =	148.2		Total (mm) =	108.9					
								MBw=	39.2		MBp=	7.9					
								Grade =	1		Grade =	2					
								Wheat Calculation			Potato Calculation						
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade	
47	0	40	SCL	10YR4/2	2	1	17	66.7	1	17	66.7	n	n	II	2	2	
	40	50	SCL	10YR5/3	fmd och	2	1	15	14.7	1	15	14.7	y	n			
	50	60	SCL	10YR5/3	fmd och	2	1	10	9.8	1	15	14.7	y	n			
	60	70	C	10YR5/3	mmd och	2	1	8	7.9	1	16	15.7	y	n			
	70	120	C	10YR5/3	mmd och	2	0.5	8	39.3				y	n			
								Total (mm) =	138.4		Total (mm) =	111.9					
								MBw=	29.4		MBp=	10.9					
								Grade =	2		Grade =	1					
								Wheat Calculation			Potato Calculation						
Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm	Gley	SP	WC	Wetness Grade	Overall Grade	
48	0	40	C	10YR4/2	fff	2	1	17	66.7	1	17	66.7	n	n	III	3b	3b
	40	50	C	10YR5/3	mmp och	2	1	15	14.7	1	15	14.7	y	y			
	50	60	C	10YR5/1	mmp och	2	1	10	9.8	1	15	14.7	y	y			
	60	70	SCL	10YR5/3	mmd och	2	1	8	7.9	1	16	15.7	y	n			
	70	120	SCL	10YR5/3	mmd och	2	0.5	8	39.3				y	n			
								Total (mm) =	138.4		Total (mm) =	111.9					
								MBw=	29.4		MBp=	10.9					
								Grade =	2		Grade =	1					

Site No.	Depth (cm)	Texture	Colour	Mottle	stones %	Wheat Calculation			Potato Calculation			Gley	SP	WC	Wetness Grade	Overall Grade	
						TAv or EAv (stones) %	TAv or EAv (soil) %	AP (wheat) mm	TAv (stones) %	TAv (soil) %	AP (potatoes) mm						
49	0	45	C	10YR4/2	femns	2	1	17	75.1	1	17	75.1	n	n	III	3b	3b
	45	50	C	10YR4/1	mfd och	2	1	13	6.4	1	13	6.4	y	y			
	50	70	C	10YR4/1	mfd och	2	1	7	13.8	1	13	25.5	y	y			
	70	120	C	10YR4/1	mfd och	2	0.5	7	34.4				y	y			
								Total (mm) =	129.6		Total (mm) =	107.0					
								MBw=	20.6		MBp=	6.0					
								Grade =	2		Grade =	2					



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



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Figure RAC6463-2 Observation Map

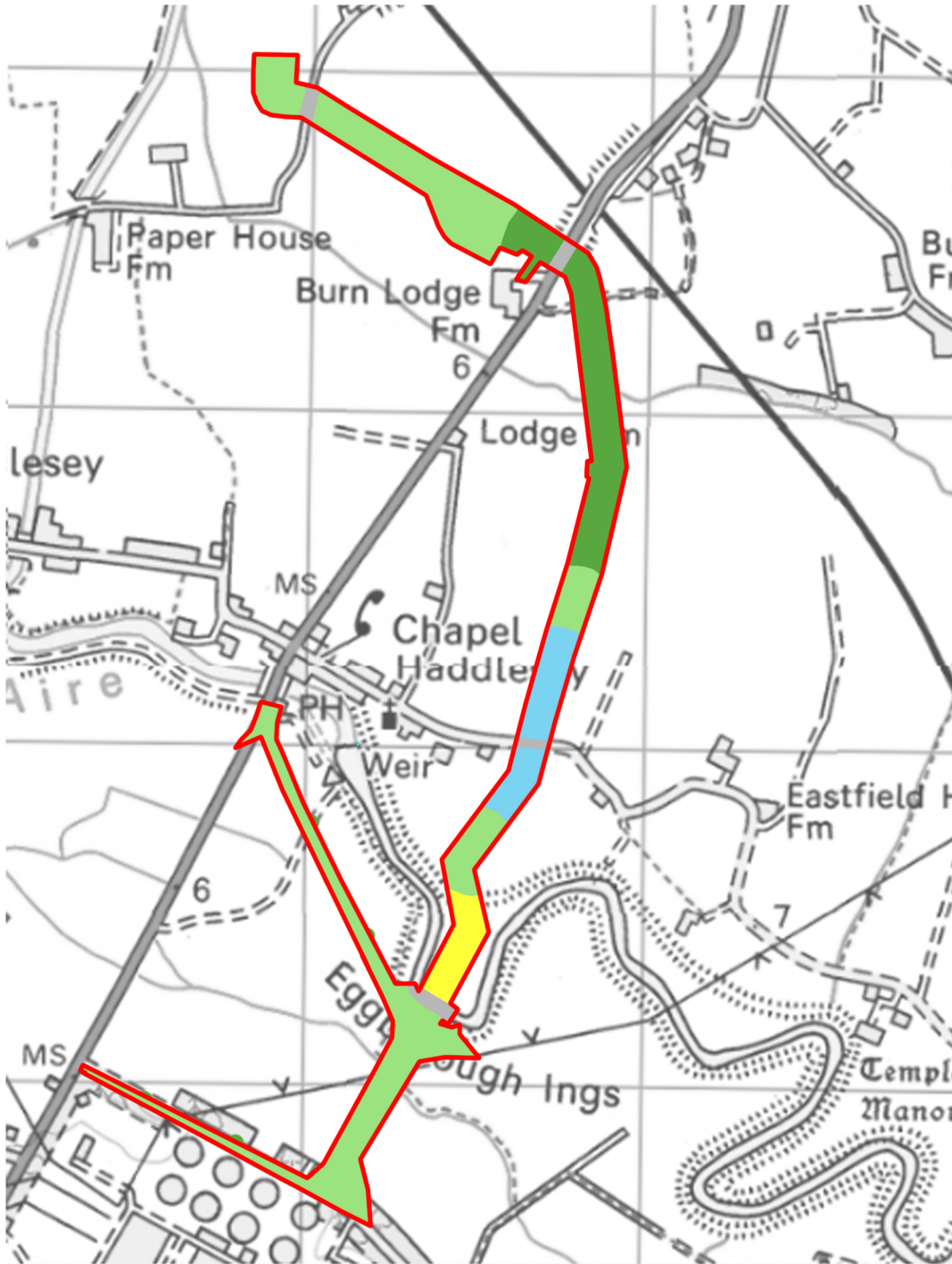
Site: Land at Eggborough, Goole

Client: Aecom Ltd

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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                 |                                |                                |

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Figure RAC7463-2 Agricultural Land Classification

Site: Land at Eggborough, Goole

Client: Aecom Ltd

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