

Stonestreet Green Solar

Environmental Statement

Volume 4: Appendices

Chapter 16: Other Topics

Appendix 16.1: Soils and Agricultural Land Report (Tracked)

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APFP Regulation 5(2)(a)

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The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



2024 April 2025

CONTENTS

1	Introduction	3
1.1	Background	3
1.2	The Project	3
1.3	This Report	3
1.4	Site Description	4
1.5	Definitions	5
2	Legislation, Policy, and guidance	6
2.2	National Policy Statements	6
2.3	Legislation	8
2.4	National Planning Policy Framework (NPPF)	8
2.5	Regional Planning Policy	9
2.6	Local Planning Policy	10
2.7	Guidance	11
3	Methodology	13
3.1	Desk Study	13
3.2	Site Survey	13
3.3	Consultation	15
4	Desk Study	21
4.1	Introduction	21
4.2	Agricultural Land Classification	23
5	Site Survey	25
5.1	Soils	25
5.2	Agroclimatic Data	27
5.3	Direct Limitations	27
5.4	Interactive ALC Limitations	27
5.5	Overall ALC	28
5.6	ALC in wider context	29
6	Conclusion	31

FIGURES

Figure 1. Typical example of the Denchworth soil series located across the Site.....25

Figure 2. Typical example of the Oxpasture soil series located across the Site.....26

Figure 3. Typical example of the Fladbury soil series located across the Site.27

TABLES

Table 3.1: Summary of responses to the EIA Scoping Report (ES Volume 4, Appendix 1.1: EIA Scoping Report (Doc Ref 5.4)) 15

Table 3.2: Summary of responses to PIER and PIER Addendum.....	19
Table 4.1: Characteristics of Soils at the Site	22
Table 4.2: Summary of ALC within Ashford Borough Council	23
Table 4.3: Combined ALC information for Ashford Borough Council	24
Table 5.1: Interpolated agroclimatic data for the Site.	27
Table 5.2: Summary of ALC within the Site Boundary.	28

APPENDICES

- Appendix 1 Soil Survey Record and Agricultural Land Classification
- Appendix 2 Soil Texture Laboratory Analysis
- Appendix 3 Droughtiness Calculations

DRAWINGS

GM12014/002

Agricultural Land Classification Map

2024 April 2025

1 INTRODUCTION

1.1 Background

1.1.1 This Soil and Agricultural Land Classification ('ALC') report has been prepared by Wardell Armstrong LLP ('WA') on behalf of EPL 001 Limited ('the Applicant') in relation to the Development Consent Order ('DCO') application for Stonestreet Green Solar ('the Project').

1.2 The Project

1.2.1 The Project comprises the construction, operation, maintenance, and decommissioning of solar photovoltaic ('PV') arrays and energy storage, together with associated infrastructure and an underground cable connection to the existing National Grid Sellindge Substation.

1.2.2 The Project will include a generating station (incorporating solar arrays) with a total capacity exceeding 50 megawatts ('MW'). The agreed grid connection for the Project will allow the export and import of up to 99.9 MW of electricity to the grid. The Project will connect to the existing National Grid Sellindge Substation via a new 132 kilovolt ('kV') substation constructed as part of the Project and cable connection under the Network Rail and High Speed 1 ('HS1') railway.

1.2.3 The location of the Project is shown on **ES Volume 3, Figure 1.1: Site Location Plan (Doc Ref. 5.3)**. The Project will be located within the Order limits (the land shown on the **Works Plans (Doc Ref. 2.3)** within which the Project can be carried out). The Order limits plan is provided as **ES Volume 3, Figure 1.2: Order Limits (Doc Ref. 5.3)**. Land within the Order limits is known as the 'Site'.

1.3 This Report

1.3.1 The report details the ALC within the Site for the Project as shown on the ALC map attached to this report (Drawing GM12014/002 Agricultural Land Classification Map).

1.3.2 The ALC survey of the Site followed the MAFF guidance (1988)¹ and is a standalone technical assessment of agricultural land quality. This report represents a definitive assessment of the ALC on Site. Assuming the land continues to be managed for agricultural purposes the ALC classification will not change over time.

¹ MAFF (1988). The Agricultural Land Classification (ALC) of England and Wales: Revised Guidelines and Criteria for Grading the Quality of Agricultural Land.

2024 April 2025

1.4 Site Description

1.4.1 The Site of the Project is located approximately 6.5km to the southeast of Ashford Town Centre and approximately 13.7km to the west of Folkestone Town Centre, in the county of Kent. The Site is situated on land located to the north and west of the village of Aldington, centred at Ordnance Survey ('OS') National Grid Reference ('NGR') TR 05898 37766.

1.4.2 The Site is within the administrative boundaries of Ashford Borough Council ('ABC') and Kent County Council ('KCC').

1.4.3 The Site covers an area of approximately 192 ha (approximately 474 acres) and is predominantly in agricultural use for arable crops and grazing. The Site includes a section of the existing Sellindge Substation and an area of land on the eastern side of the Sellindge Substation.

1.4.4 The Site comprises primarily agricultural fields delineated by hedgerows and tree belts. **ES Volume 3, Figure 2.1: Field Boundaries and Site Area Plan (Doc Ref. 5.3)** provides a Field Boundaries and Site Area Plan which numbers individual fields. For ease of reference, the areas of the Site are subsequently referred to as follows:

- South Western Area (Fields 1 to 9).
- Central Area (Fields 10 to 19 and 23 to 25).
- South Eastern Area (Fields 20 to 22).
- Northern Area (Fields 26 to 29).
- Project Substation (location of the Project Substation, in the north western section of Field 26).
- 'Cable Route Corridor' (export of electricity from the Project at 132 kilovolt ('kV') via underground cables (the 'Grid Connection Cable') to the Sellindge Substation). 'Cable Route Crossing' (use of an existing cable duct under the High Speed 1 / Channel Tunnel Rail Link ('HS1') railway or through Horizontal Directional Drilling ('HDD') beneath HS1 for the Cable Connection Cable).
- Sellindge Substation (location of the existing Sellindge Substation).

1.4.5 The East Stour River (as shown on **ES Volume 3, Figure 2.2: Environmental Designations (Doc Ref. 5.3)**) flows in an east to west direction through the Northern Area (Fields 26 to 29) and adjacent to Fields 25 and 19 within the Central Area. There are a number of unnamed drains (small open channel

2024 April 2025

watercourses) running through the Site, which generally flow north / north west to drain into the East Stour River.

- 1.4.6 The Site includes a section of the existing Sellindge Substation and an area of land on the eastern side of the Sellindge Substation. Station Road / Calleywell Lane runs north to south within and adjacent to the central part of the Site. Existing National Grid transmission lines connecting to the Sellindge Substation cross the South Eastern Area. There are no other existing built development structures within the Site.
- 1.4.7 Bank Road / Roman Road bisect the Central and South Western Areas of the Site. The Site also includes Bank Farm access track, which connects to Roman Road. Part of Goldwell Lane forms part of the Site, as cabling is proposed to be laid beneath the road surface (see **ES Volume 2, Chapter 3: Project Description (Doc Ref. 5.2)** for further details).
- 1.4.8 The Northern Area lies adjacent to and is accessed via Station Road. The South Eastern Area lies adjacent to and is accessed via Goldwell Lane. The Central Area lies adjacent to and can be accessed via Station Road, Calleywell Lane and Roman Road. The South Western Area lies adjacent to Roman Road and Laws Lane and can be accessed via Roman Road.
- 1.4.9 Topographically, the Site is lowest at approximately 44m above Ordnance Datum ('AOD') within field 19 in the north east and is highest at Bank Farm in the south west at approximately 75m AOD.

1.5 Definitions

- 1.5.1 The **ALC** was devised by MAFF (1988) and is the standard method for determining the quality of agricultural land in England and Wales according to its versatility, productivity and workability, based upon inter-related parameters including climate, relief, soil characteristics and drainage, i.e. ALC assesses land quality based upon the type and level of agricultural production the land can potentially support. The ALC places land into one of five grades: Grade 1 (excellent); Grade 2 (very good); Grade 3 (good to moderate) which is divided into Subgrades 3a (good) and 3b (moderate); Grade 4 (poor); and Grade 5 (very poor).
- 1.5.2 **Best and most versatile** ('BMV') agricultural land is defined as land of excellent to good agricultural quality (ALC Grades 1, 2 and Subgrade 3a).
- 1.5.3 **Soil series** are the lowest category in the soil classification system and are precisely defined based upon particle-size distribution, parent material (substrate) type, colour, and mineralogical characteristics. **Soil Associations**

~~2024~~April 2025

are groupings of related soil series.

2 LEGISLATION, POLICY, AND GUIDANCE

2.1.1 As the generating capacity of the Project exceeds 50MW, it qualifies as a Nationally Significant Infrastructure Project ('NSIP') requiring development consent under the Planning Act 2008. As such, the relevant National Policy Statements ('NPSs') will be the policy against which the application is determined. Legislation and other planning policy and guidance has also been included where relevant in the context of the Project.

2.2 National Policy Statements

Overarching National Policy Statement for Energy (EN-1)²

2.2.1 The Overarching National Policy Statement (NPS) for Energy (EN-1) (2023) sets out the national planning policy for energy infrastructure. It will have effect for decisions by the Secretary of State on applications for specified energy developments that qualify as NSIPs under the Planning Act 2008.

2.2.2 Referring to agricultural land, paragraph 5.11.12 states "*Applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5).*"

2.2.3 Paragraph 5.11.13 identifies the need for applicants to "*identify any effects and seek to minimise impacts on soil health and protect and improve soil quality taking into account any mitigation measures proposed.*"

2.2.4 Paragraph 5.11.34 states that, "*The Secretary of State should ensure that applicants do not site their scheme on the best and most versatile agricultural land without justification. Where schemes are to be sited on best and most versatile agricultural land the Secretary of State should take into account the economic and other benefits of that land. Where development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.*"

2 Overarching National Policy Statement for Energy (EN-1) (2023). Available at: <https://assets.publishing.service.gov.uk/media/65bbfbd709fe1000f637052/overarching-nps-for-energy-en1.pdf> Accessed April 2024

National Policy Statement for Renewable Energy Infrastructure (EN-3)³

- 2.2.5 The NPS for Renewable Energy Infrastructure (EN-3) (2023) also refers to agricultural land / land use change. Within paragraph 2.10.11 NPS EN-3 states, *“The Powering Up Britain: Energy Security Plan⁴ states that government seeks large scale ground-mount solar deployment across the UK, looking for development mainly on brownfield, industrial and low and medium grade agricultural land. It sets out that solar and farming can be complementary, supporting each other financially, environmentally and through shared use of land, and encourages deployment of solar technology that delivers environmental benefits, with consideration for ongoing food production or environmental improvement.”* As identified above in paragraph 1.5.1, low and medium grade agricultural land is classified as Subgrade 3b (moderate); Grade 4 (poor); and Grade 5 (very poor).
- 2.2.6 Within paragraph 2.10.29, NPS EN-3 states *“While land type should not be a predominating factor in determining the suitability of the site location applicants should, where possible, utilise suitable previously developed land, brownfield land, contaminated land and industrial land. Where the proposed use of any agricultural land has been shown to be necessary, poorer quality land should be preferred to higher quality land avoiding the use of “Best and Most Versatile” agricultural land where possible. ‘Best and Most Versatile’ agricultural land is defined as land in grades 1, 2 and 3a of the Agricultural Land Classification”.*
- 2.2.7 NPS EN-3 goes further to state in paragraphs 2.10.30, *“Whilst the development of ground mounted solar arrays is not prohibited on Best and Most Versatile agricultural land, or sites designated for their natural beauty, or recognised for ecological or archaeological importance, the impacts of such are expected to be considered...”*
- 2.2.8 Paragraph 2.10.31 further acknowledges that at this scale, it is likely that applicants' projects will use some agricultural land. Applicants are expected to elucidate their site selection rationale, with an emphasis on prioritizing development on suitable brownfield, industrial, and low and medium grade agricultural land.
- 2.2.9 Paragraph 2.10.33 underlines that if necessary development should be informed by an ALC survey conducted using approved methods. Followed by

3 National Policy Statement for Renewable Energy (EN-3) (2023). Available at: <https://assets.publishing.service.gov.uk/media/65a7889996a5ec000d731aba/nps-renewable-energy-infrastructure-en3.pdf> Accessed February 2024

4 See <https://www.gov.uk/government/publications/powering-up-britain/powering-up-britain-energy-security-plan#a-future-of-cheap-clean-and-british-energy-1> Accessed February 2024

2024 April 2025

paragraph 2.10.34 stating that *“Applicants are encouraged to develop and implement a Soil Resources and Management Plan which could help to use and manage soils sustainably and minimise adverse impacts on soil health and potential land contamination”*.

2.2.10 Paragraph 2.10.81 provides guidance on soil stripping. It states *“Where soil stripping occurs, topsoil and subsoil should be stripped, stored, and replaced separately to minimise soil damage and to provide optimal conditions for site restoration.”*

2.2.11 Paragraph 2.10.154 states *“Water management is a critical component of site design for ground mount solar plants. Where previous management of the site has involved intensive agricultural practice, solar sites can deliver significant ecosystem services value in the form of drainage, flood attenuation, natural wetland habitat, and water quality management.*

2.3 Legislation

2.3.1 Natural England is a Statutory Consultee listed within Schedule 1 of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009⁵ and, as such, must be consulted in relation to *‘All proposed applications likely to affect land in England’*. Natural England has been consulted on the Project.

2.4 National Planning Policy Framework (NPPF)⁶

2.4.1 Under Section 15 of the NPPF 2023: Conserving and enhancing the natural environment, Paragraph 180 states that planning policies and decisions should contribute to and enhance the natural and local environment by⁷:

- a) protecting and enhancing valued landscapes, sites of biodiversity or geological value and soils (in a manner commensurate with their statutory status or identified quality in the development plan);
- b) recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland;

⁵ The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations (2009). Available at: <https://www.legislation.gov.uk/ukSI/2009/2264/contents/made> Accessed April 2024

⁶ Ministry of Housing, Communities and Local Government (2023). National Planning Policy Framework (NPPF). Available at https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf Accessed February 2024

⁷ Paragraphs C and D have not been included here.

~~2024~~April 2025

- e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans; and
- f) remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

2.4.2 The footnote to Paragraph 181 states that *‘Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality’*.

2.4.3 The Planning Practice Guidance (‘PPG’) which accompanies the NPPF is split into a number of guidance notes. Guidance on soils and agricultural land is found in the Planning Practice Guidance for the Natural Environment (‘PPGNE’)⁸ under the heading Agricultural Land, Soil and Brownfield Land of Environmental Value. This advises that the ALC be used to assess the quality of farmland to enable informed choices to be made about its future use within the planning system; and explains that the ALC places agricultural land into five grades with Grade 3 subdivided into 3a and 3b. The BMV land is defined as Grades 1, 2 and 3a. The PPGNE states that *‘Planning policies and decisions should take account of the economic and other benefits of the best and most versatile agricultural land’*.

2.4.4 The PPGNE also recognises soil as an essential natural capital asset that provides important ecosystem services, for example as a growing medium for food, timber and other crops, as a store for carbon and water, as a reservoir of biodiversity and as a buffer against pollution.

2.4.5 The PPGNE also references Defra’s Code of Practice for the Sustainable Use of Soils on Construction Sites⁹ as a useful tool when setting planning conditions for development sites, as it provides advice on the use and protection of soil in construction projects, including the movement and management of soil resources.

2.5 Regional Planning Policy

⁸ Planning Practice Guidance for the Natural Environment 2021 (PPGNE) Available at: <https://www.gov.uk/guidance/natural-environment> Accessed April 2024

⁹ Defra (2009). Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/716510/pb13298-code-of-practice-090910.pdf Accessed April 2024

2024 April 2025

2.5.1 Regional planning policies for KCC have been reviewed but do not detail notes regarding protection and assessment requirements of agricultural land or mitigation of damage to soils other than those related and assessed under clauses for 'land drainage' and 'mineral extraction'.

2.6 Local Planning Policy

Ashford Borough

2.6.1 Current planning policy for Ashford Borough is set out in the Ashford Borough Local Plan 2030¹⁰, which was adopted in 2019 (the 'Local Plan').

2.6.2 Part a of Policy SP1: Strategic Objectives states that *'to deliver the 'Vision' [for Ashford Borough in 2030], a number of strategic objectives have been identified. They form the basis of this Local Plan's policy framework, as well as providing the core principles that planning applications are expected to adhere to. a) To focus development at accessible and sustainable locations which utilise existing infrastructure, facilities and services wherever possible and makes best use of suitable brownfield opportunities'*. Appendix 6: Monitoring Framework lists *'the amount of high-grade agricultural land (Grade 1 & 2) lost to development (ha). Major sites only'* as an indicator of whether Policy SP1 Part A is being met, with major sites being defined as *'Major residential developments are those of 10 dwellings or more or over 0.5 ha'*. The Local Plan seeks to monitor the amount of Grade 1 and 2 agricultural land lost to major residential development. It is noted that this is a different approach to NPS EN-3, which identifies Grades 1, 2, and Subgrade 3a as BMV land rather than Grades 1 and 2, only. It is assumed that this is due to the prevalence of Subgrade 3a land within the Ashford Borough area, the avoidance of which would hamper the development proposed by the Local Plan.

2.6.3 The Local Plan also references the NPPF including the following at paragraph 9.3 in the introduction to Chapter 9: Natural and Built Environment *'The conserving and enhancing of the natural environment is one of the 'core planning principles' of the NPPF (para 17). It encourages (para 109) the protection and enhancement of valued landscapes, geological conservation interests and soils. It also seeks to minimise the impact on biodiversity and encourages net gains in biodiversity through the establishment of coherent ecological networks wherever possible'*.

2.6.4 It is noted that in quoting paragraph 109 of the NPPF, the Local Plan is

¹⁰ Ashford Borough Council (2019). Ashford Local Plan 2030. Available at: <https://www.ashford.gov.uk/media/jw3nbvq1/adopted-ashford-local-plan-2030.pdf> Accessed April 2024

2024 April 2025

referencing a previous version of the NPPF from 2012, which was current at the time the Local Plan was adopted, but the commitment to the protection and enhancement of soils remains valid.

2.6.5 In Section 9, the subsection '*Standalone Renewable and Low Carbon Energy Generation*' also points to the 2012 version PPG that was current at the time the Local Plan was issued highlighting the need to focus large scale solar farms on previously developed land and non-agricultural land, and as a last resort, on low grade agricultural land. However, the related Policy ENV10 part a) simply states that '*Planning applications for proposals to generate energy from renewable and low carbon sources will be permitted provided that:*

a) *The development, either individually or cumulatively does not result in significant adverse impacts on the landscape, natural assets or historic assets, having special regard to nationally recognised designations and their setting, such as AONBs, Conservation Areas and Listed Buildings*'.

2.6.6 It is assumed that soils and agricultural land are therefore classed as 'natural assets' in this case.

2.7 Guidance

2.7.1 The applicable guidance in relation to soils and agricultural land is summarised as follows:

- HM Government (2019). Planning Practice Guidance for the Natural Environment¹¹;
- Natural England, (2009). Technical Information Note 049 (TIN049): Agricultural Land Classification: Protecting the Best and Most Versatile Agricultural Land¹²;
- Natural England (2021). Guide to Assessing Development Proposals on Agricultural Land¹³
- Defra (2018). Construction Code of Practice for the Sustainable Use of Soils on Construction Sites¹⁴; and

¹¹ HM Government (2019). Planning Practice Guidance for the Natural Environment. Available at <https://www.gov.uk/guidance/natural-environment> Accessed April 2024

¹² Natural England (2009). Technical Information Note 049 (TIN049): Agricultural Land Classification: Protecting the Best and Most Versatile Agricultural Land. Available at: <https://www.iow.gov.uk/azservices/documents/2782-FE14-Natural-England-TIN049-Agricultural-Land-Classification.pdf> Accessed April 2024

¹³ Natural England (2021). Guide to assessing Development Proposals on Agricultural Land. Available at: <https://www.gov.uk/government/publications/agricultural-land-assess-proposals-for-development/guide-to-assessing-development-proposals-on-agricultural-land> Accessed April 2024

¹⁴ DEFRA (2018). Construction Code of Practice for the Sustainable Use of Soils on Construction Sites. Available at: <https://www.gov.uk/government/publications/code-of-practice-for-the-sustainable-use-of-soils-on-construction-sites> Accessed April 2024

~~2024~~April 2025

- MAFF (1988). Agricultural Land Classification of England and Wales: Revised Guidelines and Criteria for Grading the Quality of Agricultural Land.¹⁵

¹⁵ MAFF (1988). Agricultural Land Classification of England and Wales: Revised Guidelines and Criteria for Grading the Quality of Agricultural Land. Available at: <http://publications.naturalengland.org.uk/publication/6257050620264448>. Accessed April 2024

2024 April 2025

3 METHODOLOGY

3.1 Desk Study

3.1.1 Information about the soils and agricultural land present within the Site was obtained from the following published sources:

- MAFF (1993). 1:250,000 'Provisional Agricultural Land Classification Sheet, London and the South East'¹⁶;
- Met Office (1989). Climatological Data for Agricultural Land Classification: Grid point datasets of climatic variables at 5 km intervals for England and Wales¹⁷;
- Soil Survey of England and Wales (1984). Soils and their Use in South East England, with accompanying 1: 250,000 map, Sheet 2¹⁸;
- OS (2021). Terrain 5 Digital Terrain Modelling¹⁹;
- Multi-Agency Geographical Information for the Countryside ('MAGIC')²⁰;
- Google Maps including Streetview²¹;
- Munsell (2010) Colour Charts²²; and
- Cranfield University (2015). Research to develop the evidence base on soil erosion and water use in agriculture²³.

3.2 Site Survey

3.2.1 A detailed soil survey was undertaken at the Site between 29th November and 15th December 2021 by three experienced and competent soil surveyors using augered soil cores and soil profile pits. A further soil survey was carried out on 4th January 2023. As noted within **paragraph 1.3.2** above, provided that there is no change in land use at the Site and the Site continues to be managed for agricultural purposes, the ALC classification for the Site as identified within

¹⁶ MAFF (1993). 1:250,000 Provisional Agricultural Land Classification Sheet, London and the South East. Available at: <https://data.gov.uk/dataset/952421ec-da63-4569-817d-4d6399df40a1/provisional-agricultural-land-classification-alc> Accessed April 2024

¹⁷ Met Office (1989) Climatological Data for Agricultural Land Classification: Grid point datasets of climatic variables at 5km intervals for England and Wales. Available at: <https://data.gov.uk/dataset/8a334958-ff65-4f5c-9674-5a85e61ee269/climatological-data-for-agricultural-land-classification> Accessed April 2024

¹⁸ Soil Survey of England and Wales (1984) Soils and their Use in South East England, with accompanying 1: 250,000 map, Sheet 2. These data are not available online.

¹⁹ OS Terrain 5. Available at: <https://www.ordnancesurvey.co.uk/business-government/products/terrain-5> Accessed April 2024

²⁰ HM Government. Multi-Agency Geographical Information for the Countryside (MAGIC). Available at: www.magic.gov.uk Accessed April 2024

²¹ Google Maps (@2021). Available at: <https://www.google.co.uk/maps/> Accessed July 2022

²² Munsell Colour (2010). Munsell Soil Colour Charts. Available at: <https://munsell.com/> Accessed April 2024

²³ Cranfield University (2015). 'Research to develop the evidence base on soil erosion and water use in agriculture: Final Technical Report. pp147' Available at <https://www.theccc.org.uk/wp-content/uploads/2015/06/Cranfield-University-for-the-ASC.pdf> Accessed April 2024

~~2024~~April 2025

Section 5 of this report will not change over time.

- 3.2.2 Weather conditions during the survey days in 2021 and 2023 were variable, with intermittent showers occurring in early December 2021.
- 3.2.3 Auger cores were taken using a 70mm diameter hand-held Edelman auger, capable of sampling to a maximum depth of 120cm; the soil profile pits were excavated, using a spade, to a maximum depth of approximately 100cm, sufficient to evaluate the full soil profile.
- 3.2.4 During the survey, both auger cores and profile pit faces were assessed for horizon depth, texture, colour (Munsell System), mottling, biopores, stoniness, structure and consistency in line with the MAFF 1988 ALC guidelines.
- 3.2.5 The survey points were distributed evenly across the Site, giving a survey density of 185 survey points across the 178.43 ha of surveyed agricultural land²⁴ and 10 survey points across the cable route area, deemed sufficient to accurately assess the soils on the Site and giving an approximate survey density of one point per hectare as per standard methodology and guidance. Soils were mapped on an approximate 100m grid with precise sample points adapted in the field to best capture data for locations where geomorphological, biological or land use features indicated a likely change in soil type; and avoiding features such as hedgerows and tracks.
- 3.2.6 The purpose of the survey was to provide details of soil profile characteristics and to inform the ALC assessment within this report.
- 3.2.7 Soil texture is often the deciding factor in relation to ALC grading. Therefore, although good estimations of texture (based on relative percentage content of clay, sand, and silt) can be determined by field analysis, to confirm the soil texture and inform soil quality across the Site, 33 soil samples were sent for particle size distribution textural analysis by NRM Laboratories (a subsidiary of Cawood Scientific), accredited by UKAS to the internationally recognised standard for competence; ISO/IEC 17025²⁵. Provision of such analysis is considered to be best practice. The results are included in Appendix 2: Soil Texture Laboratory Results and summarised later in this report.

²⁴ It should be noted that the ALC survey covered 192.54ha in size and discrepancy with reported areas is due to changes in the Project boundary.

²⁵ ISO/IEC 17025 General requirements for the competence of testing and calibration laboratories. Available at: <https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100424.pdf> Accessed April 2024

2024 April 2025

3.3 Consultation

EIA Scoping

- 3.3.1 Table 3.1 of this report provides a summary of the responses to the EIA Scoping Report (**ES Volume 4, Appendix 1.1: EIA Scoping Report (Doc Ref. 5.4)**) of relevance to this assessment and how the assessment has responded to them. It should be noted that this report has been updated to reflect the final Order limits.

Table 3.1: Summary of responses to the EIA Scoping Report (ES Volume 4, Appendix 1.1: EIA Scoping Report (Doc Ref 5.4))

Comments	Response to Comments
PINS	
The Scoping Report includes information to quantify the loss of best and most versatile (BMV) land based on soil surveys and explains why significant effects on agricultural land and soils are unlikely. The ES should include the information used to support scoping, however, on the basis of the above information is provided, the Inspectorate is content to scope this matter out. Where the ES relies upon grazing as mitigation for loss of Best and Most Versatile (BMV) land, it should be demonstrated that the land is not subject to restrictive covenants that would prevent such use and that such mitigation is secured in respect of the operation of the Proposed Development.	This ALC report, which supports the DCO application, provides the requisite information to confirm the findings of the initial assessment provided within ES Volume 4, Appendix 1.1: EIA Scoping Report (Doc Ref 5.4) , i.e., agricultural land and soils effects are not significant. The nature of the Project (a solar farm) is such that it provides potential for the land beneath and around the PV panels to continue in, albeit altered, agricultural use during the Project's operational lifetime, with potential for agricultural grazing. The Project is not relying on grazing for mitigation. However, there is no restrictive covenant in place that would prevent such a use (i.e., grazing).
Natural England	
Under the Town and Country Planning (Development Management Procedure) (England) Order 2015 (DMPO) Natural England is a statutory consultee on development that would lead to the loss of over 20ha of 'best and most versatile' (BMV) agricultural land (land graded as 1, 2 and 3a in the Agricultural Land Classification (ALC) system, where this is not in accordance with an approved plan.	It is noted that the response provided by Natural England includes reference to now superseded versions of the NPSs and NPPF. Section 2 of this report provides an up-to-date overview of current Legislation, Policy, and Guidance at the time of writing. The development of ground mounted solar arrays is not prohibited on agricultural land classified as Grade 1, 2 and 3a under the ALC system, as stated in NPS EN-3 at paragraph 2.10.30. However, it is acknowledged that Natural England considers that the Project is unlikely to

2024 April 2025

Natural England has been unable to locate an assessment within the PEIR in relation to the assessment of impacts to land use and agricultural soils. That said, from the description of the development this application is likely to affect best and most agricultural land. We consider that the proposed development, if temporary as described, is unlikely to lead to significant permanent loss of BMV agricultural land, as a resource for future generations. This is on the basis that the solar panels would be secured to the ground by steel piles with limited soil disturbance and could be removed in the future with no permanent loss of agricultural land quality likely to occur, provided the appropriate soil management is employed and the development is undertaken to high standards. We note that some components of the development, such as construction of a sub-station, may permanently affect agricultural land and this should be fully assessed within the Environmental Statement.

However, during the life of the proposed development it is likely that there will be a reduction in agricultural production over the whole development area. Your authority should therefore consider whether this is an effective use of land in line with planning practice guidance which encourages the siting of large scale solar farms on previously developed and non-agricultural land.

Paragraph 5.10.8 of the National Policy Statement for Energy details that 'Applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5)

lead to significant permanent loss of BMV land, which aligns with the findings of the initial assessment provided within the **ES Volume 4, Appendix 1.1: EIA Scoping Report (Doc Ref 5.4)**, and the information provided within this ALC report.

As outlined within the response above, the nature of the Project (a solar farm) is such that it provides potential for the land beneath and around the PV panels to continue in, albeit altered, agricultural use during the Project's operational lifetime, with potential for agricultural grazing. As such, this land would only be temporarily removed from agricultural use during the construction phase and could be returned to include an agricultural use during the operational phase. This would result in minimal loss of/or disturbance to the continued agricultural land use of the Site.

An **Outline Soil Management Plan ('SMP')** is included within the **Outline Construction Environmental Management Plan ('CEMP')** (Doc Ref. 7.8), with its principles to be incorporated into the detailed CEMPs. The **Outline SMP** has been prepared in line with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2009)⁹, which is the overarching guidance governing the management of soil in construction.

~~2024~~April 2025

except where this would be inconsistent with other sustainability considerations.

Applicants should also identify any effects and seek to minimise impacts on soil quality taking into account any mitigation measures proposed’.

Similarly, Paragraph 174b and footnote 53 of the National Planning Policy Framework (NPPF) states that:

‘Planning policies and decisions should contribute to and enhance the natural and local environment by:

recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland.’

Footnote 53: Where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality. We would also draw to your attention to Planning Practice Guidance for Renewable and Low Carbon Energy (March 2015) (in particular paragraph 013), and advise you to fully consider best and most versatile land issues in accordance with that guidance.

Decision makers are responsible for ensuring that they have sufficient information to apply the requirements of the NPPF and the National Policy Statement for Energy. The weighting attached to a particular consideration is a matter of judgement for the decision maker. This is the case regardless of whether the proposed development is sufficiently large to consult Natural England.

2024 April 2025

Should you have any questions about ALC or the reliability of information submitted with regard to BMV land please refer to Natural England's 'Guide to assessing Development proposals on Agricultural Land'. This document describes the ALC system including the definition of BMV land, existing ALC data sources and their relevance for site level assessment of land quality and the appropriate methodology for when detailed surveys are required.

Soil is a finite resource which plays an essential role within sustainable ecosystems, performing an array of functions supporting a range of ecosystem services, including storage of carbon, the infiltration and transport of water, nutrient cycling, and provision of food. It is recognised that a proportion of the agricultural land will experience temporary land loss. In order to both retain the long term potential of this land and to safeguard all soil resources as part of the overall sustainability of the whole development, it is important that the soil is able to retain as many of its many important functions and services (ecosystem services) as possible through careful soil management and appropriate soil use, with consideration on how any adverse impacts on soils can be avoided or minimised.

General guidance for protecting soils during development is also available in Defra's Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, and should the development proceed, we recommend that relevant parts of this guidance are followed, e.g. in relation to handling or trafficking on soils in wet weather.

The British Society of Soil Science

2024 April 2025

has published the Guidance Note Benefitting from Soil Management in Development and Construction which sets out measures for the protection of soils within the planning system and the development of individual sites, which we also recommend is followed.	
Aldington Parish Council	
Best Use of Land: All Grade 2 and Grade 3a Best & Most Versatile Land should be removed from the proposal.	The development of ground mounted solar arrays is not prohibited on agricultural land classified as Grade 1, 2 and 3a under the ALC system, as stated in NPS EN-3 at paragraph 2.10.30. The Planning Statement, Appendix 2: Sequential and Exception Test Report (Doc Ref. 7.6) confirms that there is no previously developed land within the 5km search area which could offer a suitable alternative site that would meet the Project requirements. The layout of the Project has avoided the use and permanent loss of BMV where possible. The Project Substation is sited on Grade 3b land. The nature of the Project is such that it involves minimal permanent loss of agricultural land.

3.3.2 As part of the 2022 Statutory Consultation on the Preliminary Environmental Information Report (PIER) and 2023 Statutory Consultation on the PIER Addendum, Natural England provided a series of comments that related to several technical aspects which fall within its remit. The Natural England response included comments in relation to BMV. Table 3.2 of this report provides a summary of the responses to the PIER and PIER Addendum of relevance to this assessment and how the assessment has responded to them.

Table 3.2: Summary of responses to PIER and PIER Addendum	
Comments	Response to Comments
Natural England	
As stated in our previous response to the PEIR under the Town and Country Planning (Development Management Procedure) (England) Order 2015 (DMPO) Natural England is a statutory consultee on development that would lead to the loss of over 20ha of 'best and most	It is acknowledged that Natural England considers that its initial assessment, as outlined within Table 3.1 above, remains valid and that the Project is unlikely to lead to significant permanent loss of BMV land. See Table 3.1 above for responses to Natural England's previous comments.

~~2024~~April 2025

versatile' (BMV) agricultural land (land graded as 1, 2 and 3a in the Agricultural Land Classification (ALC) system, where this is not in accordance with an approved plan. We are pleased to see that the PEIR Addendum now includes a detailed Soils and Agricultural Land Assessment at Appendix 2.4. We are satisfied with the soil survey work which has been undertaken and note that around 37.75ha of BMV agricultural land will be affected by the proposal. Our detailed comments and the further advice signposted in our previous response to the original PEIR were based on the assumption that a significant proportion of BMV land was likely to be affected. These comments remain relevant and we have nothing further to add to them at this stage.

~~2024~~April 2025

4 DESK STUDY

4.1 Introduction

- 4.1.1 Soil series are the lowest category in the soil classification system and are precisely defined based upon particle-size distribution, parent material (substrate) type, colour and mineralogical characteristics. However, the soils mapping provided by the Soil Survey of England and Wales describes Soil Associations, which are groupings of related soil series. Additionally, the scale of the mapping is such that it is not accurate to the field level and does not pick up small-scale local variations in soil type. The mapping therefore provides a general indication of the soil types likely to be present within the Site and the wider area.
- 4.1.2 The Soil Survey of England and Wales indicates there are two soil associations present within the Site, the Wickham 1 (711e) and Fladbury 3 (813d) association. A summary of the characteristics of these soil associations is provided in Table 4.1.
- 4.1.3 Soil erodibility, as presented in **Table 4.1** of this report, is a measure of the susceptibility of soils to loss both *in-situ* (i.e., as an undisturbed soil profile) and during soil stockpiling, due to wind or water erosion (natural erosion potential). As a rule, heavy (clay rich) soils are classified as being at low risk of erosion whilst light sandy soils are classified as high risk of erosion.
- 4.1.4 However, it is important to note that soils of differing texture and structural development may be subject to a range of potential impacts during and following handling and reinstatement. For example, the incorrect handling / reinstatement of a heavy (clay rich) soil whilst in a plastic state may result in a reinstated soil profile with a reduced natural drainage compared to the natural soil profile and a subsequent increased risk of soil loss (erosion) due to surface water run-off. Whereas the permeable nature of light sandy soils means that the natural structural recovery and drainage potential of the soils is more easily maintained upon reinstatement.

Table 4.1: Characteristics of Soils at the Site						
Soil association	Constituent soil series	Geology	Soil type	Soil characteristics	Wetness class	Erodibility**
Wickham 1 (711e)*	Wickham Denchworth Dale Oxpastures	Drift over Cretaceous clay or mudstone	Slowly permeable seasonally wet slightly acid, but base-rich loamy and clayey soils	Slowly permeable seasonally waterlogged fine silty over clayey, fine loamy over clayey and clayey soils.	Wickham, Denchworth and Dale series have slowly permeable subsoils and are waterlogged for long periods in winter (Wetness Class IV) when undrained. Field drainage measures achieve some improvement, (Wetness Class III or IV)	Small risk of water erosion
Fladbury 3 (813d)*	Fladbury Conway Enborne	River Alluvium	Loamy and clayey floodplain soils with naturally high groundwater	Stoneless clayey, fine silty and fine loamy soils affected by groundwater. Flat land. Risk of flooding	Waterlogged for long periods in winter (Wetness Class IV). Improved field drainage measures can result in (Wetness Class III)	Very Small Risk of water erosion
*Data sourced from: Soil Survey of England and Wales (1984). Soils and their Use in South East England. ISBN 100708402992. ** Cranfield University (2015)						

2024 April 2025

4.2 Agricultural Land Classification

- 4.2.1 The most detailed published ALC data covering the Site is the Provisional 1:250,000 ALC mapping. As with the soils data, the scale of the mapping is not accurate at the field level, as it does not pick up variations in ALC grade for areas less than approximately 80ha. However, it does provide an indication of the predominant ALC grading in the wider area. Additionally, the mapping does not provide a subdivision of Grade 3 into Subgrade 3a (BMV) and Subgrade 3b (non-BMV) and so cannot be used to identify the likely amount of BMV land within the Site.
- 4.2.2 The mapping indicates that all agricultural land within the Site is of, or has the potential to be, BMV quality (Grade 2, very good quality and Grade 3, good/moderate quality).
- 4.2.3 A breakdown of provisional and any Post-1988 ALC data within the local administrative regions in which the Site falls is provided in **Table 4.2** for ABC.

Table 4.2: Summary of ALC within Ashford Borough Council		
ALC or other land category	Area (ha)	Percentage %
<i>Provisional ALC</i>		
Grade 1 (excellent)	926.3	1.6
Grade 2 (very good)	11,320.6	19.5
Grade 3 (good to moderate)	39,753.6	68.5
Grade 4 (poor)	2,225.0	3.8
Grade 5 (very poor)	0.0	0.0
Non-agricultural	2,704.0	4.7
Urban	1,132.3	2.0
Total	58,061.7	100.0
<i>Post-1988 ALC</i>		
Grade 1 (excellent)	52.1	8.8
Grade 2 (very good)	202.3	34.2
Subgrade 3a (good)	81.0	13.7
Subgrade 3b (moderate)	165.4	28.0
Grade 4 (poor)	10.8	1.8
Grade 5 (very poor)	0.2	0.0
Not surveyed	37.8	6.4
Other	42.0	7.1
Total	591.7	100.0

2024 April 2025

4.2.4 In ABC, the provisional ALC shows that the majority of the land (68.5%) is Grade 3, and part of it has the potential to be of BMV quality agricultural land. As shown in Table 4.2, the majority of agricultural land in the wider area is classed as Grade 3 (Good to Moderate quality), but the data does not differentiate between Sub-grade 3a (good quality, BMV) and Sub-grade 3b (moderate quality, non-BMV) and, therefore, does not accurately identify the coverage of BMV land.

4.2.5 Available Post-1988 data for the council boundary shows the majority of surveyed land to be Grade 2 (34.2%) and Subgrade 3a (13.7%), and some Subgrade 3b (28.0%). Based on the available post-1988 data, a 50:50 distribution was conservatively applied to subdivide area under provisional ALC Grade 3 within the administrative boundary of ABC. The estimated distribution of ALC gradings using this split method for the ABC area are indicated within Table 4.3.

Table 4.3: Combined ALC information for Ashford Borough Council		
ALC or other land category	Area (ha)	Percentage %
<i>Provisional ALC + Post 1988</i>		
Grade 1 (excellent)	950.8	1.6
Grade 2 (very good)	11,289.6	19.5
Subgrade 3a (good)	19,796.7	34.1
Subgrade 3b (moderate)	19,881.1	34.3
Grade 4 (poor)	2,227.4	3.8
Grade 5 (very poor)	0.2	0
Non-agricultural/not-surveyed/urban/other	3,916.1	6.7
Total*	58,061.9	100.0
*Any discrepancies in values between Table 4.2 and Table 4.3 may stem from rounding decimals of summed grading classes.		

2024 April 2025

5 SITE SURVEY

5.1 Soils

5.1.1 The ALC survey confirmed the presence of the Denchworth, Oxpasture and Fladbury soil series within the Site. These soils series are heavy textured (clayey) soils with impeded drainage, influencing the overall ALC grade. A detailed description of the specific soil profiles observed within the Site are described in **Appendix 1: Soil Survey Record and Agricultural Land Classification**. A summary is provided below.

Denchworth

5.1.2 The topsoil is typically a dark greyish medium to heavy clay loam that is very slightly stony, fitting the description of the Denchworth soil series (**Figure 1**). It had a fine weak subangular blocky structure and was of moderate consistency. It extended to an average depth of c. 33cm.

5.1.3 The upper subsoil is a grey, ochreous mottled heavy clay loam. It is medium subangular blocky in structure and extended to an average depth of c. 62cm.

5.1.4 The lower subsoil is a grey, mottled stoneless clay loam with a weak coarse prismatic structure extended to an approximate minimum depth of c. 120cm. The laboratory results for Particle Size Distribution ('PSD') confirmed the results of the manual in-field texturing (**Appendix 2**).



Figure 1. Typical example of the Denchworth soil series located across the Site.

Oxpasture

5.1.5 The very slightly stony, dark brown topsoils of the Oxpasture series were identified by manual in-field texturing as clay to heavy clay loams (**Figure 2**); which was supported by the PSD analysis (**Appendix 2**). All sample points displayed a fine subangular blocky structure and had a moderate friable consistency. The topsoil horizon reached typical depths of c. 31cm.

2024 April 2025

- 5.1.6 The upper subsoil was a yellowish to strong brown slightly stony clay loam. It had a moderate medium subangular blocky structure and had typical depths of c. 65cm. The lower subsoil was a light yellowish brown containing up to 40% mottles which was stoneless and had a clay loam texture. The structure was medium subangular blocky or prismatic. The upper subsoil reached minimum depths of c. 120cm.



Figure 2. Typical example of the Oxpasture soil series located across the Site

Fladbury

- 5.1.7 The Fladbury soil series on the Site consisted of heavy clay loam texture (**Figure 3**). The topsoil had a subangular blocky structure; and was moderately developed and had a fine to medium ped size. The average depth was 35cm.
- 5.1.8 The upper subsoil displayed substantial gleying indicating impeded draining and slow permeability. The structure was prismatic and had very firm consistency. Average depth was 59cm.
- 5.1.9 Typically, the lower subsoil had a coarse ped size, very firm consistency and a prismatic structure. The soil was strongly developed with clear evidence of gleying and was slowly permeable and reached a minimum depth of 120cm.



Figure 3. Typical example of the Fladbury soil series located across the Site.

5.2 Agroclimatic Data

- 5.2.1 Agroclimatic data were taken from the nearest meteorological stations and interpolated to obtain site specific values (**Table 5.1**). This was then used to establish whether the agricultural land quality of the Site is limited by climate and, in conjunction with soil profile characteristics, wetness and droughtiness. It was found that independently climate posed no limitation to ALC grade.

Table 5.1: Interpolated agroclimatic data for the Site.

Average annual rainfall (mm)	742
Accumulated Temperature (°C)	1,449
Field Capacity Duration (FCD) (days)	153
Moisture Deficit Wheat (mm)	118
Moisture Deficit Potatoes (mm)	113

5.3 Direct Limitations

- 5.3.1 There are no Site limitations to agricultural land quality due to the combination of average annual rainfall and accumulated temperature.
- 5.3.2 There are no Site limitations to agricultural land quality because of gradient, micro-relief and summer or winter flood risk.
- 5.3.3 There are no Site limitations to agricultural land quality because of topsoil texture or soil depth.
- 5.3.4 At survey points 78, 95, and 96 (as shown on **Drawing GM12014/002 Agricultural Land Classification**), topsoil stoniness limited the ALC grade to Grade 2, and at survey point 97, topsoil stoniness limited ALC grade to Subgrade 3a.

5.4 Interactive ALC Limitations

2024 April 2025

5.4.1 The Site is limited by climate and more specifically the combination of wetness and droughtiness to Grade 2, Subgrades 3a, and Subgrade 3b. Wetness is a result of the depth of the slowly permeable layer causing moisture to accumulate and consequently resulting in waterlogging during wetter months, hindering full yield potential throughout the growing season. Droughtiness is a result of the inadequate supply of soil moisture being available in hotter months, the ground conditions at the Site would be expected to shrink and crack due to the heavy textured clay soils present. Droughtiness calculations are shown in **Appendix 3**.

5.5 Overall ALC

5.5.1 The predominant ALC grading within the Site is Subgrade 3b (143.47 ha), with the remaining agricultural land comprising Subgrade 3a land (36.69 ha) and Grade 2 land (1.95 ha). The total area of BMV land within Site is 38.64 ha. The remaining areas within the Site boundary comprise a small area of non-agricultural land consisting of existing farm buildings and infrastructure, woodland, watercourses (including East Stour River), railway lines, urban areas, and roads (9.43 ha). The distribution of ALC gradings within the Site is shown in **Drawing GM12014/002 Agricultural Land Classification**²⁶, and a summary is provided in **Table 5.2**.

Table 5.2: Summary of ALC within the Site Boundary.		
ALC or other land category	Area (ha)	Percentage %
Grade 2 (very good)	1.95	1.02
Subgrade 3a (good)	36.69	19.16
Subgrade 3b (moderate)	143.47	74.90
Non-agricultural	9.43	4.92
Total	191.54	100%

5.5.2 The main differentiating factor between Subgrade 3a and Subgrade 3b classifications was the depth to the slowly permeable layer, giving rise to different wetness classes. This is predominantly due to the change in relief of the land and subsequent water shedding causing variable groundwater fluctuations across the Site, i.e. the Grade 2 and subgrade 3a areas are higher in elevation and have slopes that shed the water more easily, as opposed to the areas of Subgrade 3b, which are lower lying and will shed water less readily.

²⁶To avoid potential confusion, it should be noted that the points illustrated on the drawing are not numbered sequentially, but they are correct and match the data within Appendix 1 and 3.

2024 April 2025

5.6 ALC in wider context

- 5.6.1 The majority of land within the Order limits (approximately 143 ha) is ALC Subgrade 3b and therefore does not fall within the definition of BMV agricultural land. The main limitations to ALC grading for these areas was wetness and droughtiness. The BMV agricultural land within the Site (i.e., 38.64 ha) represents 0.12% of all BMV agricultural land in ABC, with 55.2% of the agricultural area in ABC being of BMV quality.
- 5.6.2 NPS EN-1 and EN-3 include a preference for development of non-agricultural land over agricultural land, and when unavoidable, for development of agricultural land to be directed towards land of the lowest available quality. NPS EN-3 does confirm, however, that *“the development of ground mounted solar arrays is not prohibited on Best and Most Versatile agricultural land...”*.
- 5.6.3 In accordance with relevant policy and guidance, the Applicant has sought to avoid the use of BMV land where possible, with preference given to the use of land in areas of poorer quality. Whilst land type has not been a predominating factor in determining the suitability of the Site, ALC has been taken into account as part of the site selection process. Most land within ABC is provisionally mapped as Grade 3 (potential of BMV) with areas of “high grade” Grade 1 and Grade 2 BMV land. Locating the Project elsewhere in either the Borough or District is likely to incur a similar, if not greater, impact on BMV land.
- 5.6.4 The nature of the Project (a solar farm) is such that it provides potential for the land beneath and around the solar arrays (Work No. 1, c. 129 ha of land) to continue in agricultural use during the Project’s operational lifetime, with potential for agricultural grazing. Grazing of the Site is dependent upon demand and on other required aspects of the Site design as agreed through planning, such as the alternative use of the land for biodiversity and nature conservation. The land within the Site is not subject to restrictive covenants that would prevent grazing.
- 5.6.5 No more than c. 129 ha (67 %) of land within the Site would be covered by the solar arrays, which would be piled directly into the ground without prior soil removal. The only potential requirement for the stripping, temporary stockpiling or storage of topsoil would be associated with the construction of any required cable trenches, access tracks, Inverter Stations, Project Substation and Intermediate Substations associated with Work No.s 2, 3, 4 and 5 (referred to here as ‘built infrastructure’), this is estimated to be approx. 10 ha (5%) of the Site total area. Incorrect handling and storage of soils has the potential to lead to the loss of, or damage to soil resources. The traffic movements required

~~2024~~April 2025

during construction and decommissioning may also cause short-term damage to the soil through compaction or erosion. Standard good practice soil management measures, such as those set out in Defra's Code of Practice for the Sustainable Use of Soils on Construction Sites⁹, would be prepared to ensure that the levels of loss and damage are minimised. This would ensure compliance with local and national planning policy regarding the protection and sustainable use of soil resources with mitigation for construction and decommissioning impacts being outlined in the **Outline CEMP (Doc Ref. 7.8)** and **Outline Decommissioning Environmental Management Plan ('Outline DEMP') (Doc Ref. 7.12)**. An **Outline SMP** is provided in the **Outline CEMP (Doc. Ref. 7.8)** and the **Outline DEMP (Doc Ref. 7.12)**.

- 5.6.6 Following the operational lifetime of the Project, all infrastructure built as part of the Project will be removed from the Site (with the exception of elements of Work No. 4 that are within Sellindge Substation, any repairs, upgrades or replacements of/to the existing bridge / drain crossings, PRow footbridges and highway improvements). Post-decommissioning the Site will be returned to the control of the landowners. It has been assumed that the landowners will return those areas of the Site that are currently in arable use back to arable use, except for limited areas of established habitats.
- 5.6.7 Permanent grassland cover within the solar array fields (Work No. 1) for the lifetime of the Project (i.e., 40-years) would be beneficial to the soil structure, as it would protect the soil from wind erosion when dry; scour erosion due to runoff from the solar arrays; and damage from trafficking and surface water runoff during wet periods (traversing wet soil must be avoided).
- 5.6.8 If managed as unimproved grassland, there would also be no requirement for annual fertiliser applications over the lifetime of the Project, which will have a local and watershed environmental benefit and allow nutrient concentrations within the soils to reduce to more natural levels which will promote the growth of native grass species.

6 CONCLUSION

- 6.1.1 The soil survey has shown the soils within the Site to be dominated by heavy and medium clay soils. Topsoils were generally stoneless to slightly stony in isolated regions. The upper subsoil and lower subsoil displayed mottling throughout the Site with the consistency becoming firmer at depth.
- 6.1.2 The Provisional ALC mapping⁹ identified the agricultural land within the Site as ALC Grade 2 (very good quality) and Grade 3 (moderate/good quality). The detailed ALC survey confirmed the actual grading of the agricultural land within the Site to be predominantly non-BMV quality land (143.47 ha, 74.90%) comprising ALC Subgrade 3b; with smaller areas of BMV quality land (38.64 ha or 20.18 %) comprising ALC Grade 2 and Subgrade 3a. The remaining land within the Site boundary is non-agricultural land (9.43 ha, 4.92 %).
- 6.1.3 The BMV agricultural land within the Site (i.e., 38.64 ha) represents 0.12% of all BMV agricultural land in ABC.

Appendix 1: Soil Survey Record and Agricultural Land Classification

APPENDIX 1: SOIL SURVEY RECORD AND AGRICULTURAL LAND CLASSIFICATION

Legend for non-self-explanatory terms:

Horizons - number of different horizons identified within the profile

Type - type of sample, auger core or soil profile pit dug using a spade

Depth - depth to the bottom of the (horizon number) horizon in cm

Texture - C - clay, ZC - silty clay, SC - sandy clay, CL - clay loam, SCL - sandy clay loam, ZCL - silty clay loam, SL - sandy loam, LS - loamy sand, S - sand;

CL and ZCL textures are subdivided into medium (M) and heavy (H) classes according to clay content, as follows: M medium (less than 27 % clay), H heavy (27-35 % clay); F, M and C refer to fine, medium and coarse, respectively, and are subdivisions of S, LS, SL, and SZL textures; O - organic, P - peat or peaty, HP - humified (highly decomposed peat), FP - fibrous peat, SFP - semi-fibrous peat; MZ - marine light silts

Matrix (main) colour - dominant colour of the soil; **Hue** - Munsell colour hue; **Value** - Munsell colour value; **Chroma** - Munsell colour chroma

Mottling - spots and blotches of different colour than the dominant matrix colour

Ped faces - surfaces of the primary soil fragments into which the soil naturally breaks up upon excavating

FeMn - ferri-manganiferous concretions

Biopores - 'yes' if >0.5 % biopores greater than 0.5 mm diameter present (by area)

Stones > 2 cm up to % - maximum percentage of 2 - 6 cm diameter stones

Stones > 6 cm up to % - maximum percentage of > 6 cm diameter stones

Type - H - All hard rocks or stones (those which cannot be scratched with a finger nail); SS - Soft, medium or coarse grained sandstones; SIM - Soft 'weathered' igneous or metamorphic rocks or stones; SL - Soft oolitic or dolomitic limestones; SFS - Soft fine-grained sandstones; SAZ - Soft, argillaceous or silty rocks or stones; CH - Chalk or chalk stones; GRH - Gravel¹ with non-porous (hard) stones; GRS - Gravel¹ with porous stones (mainly soft stone types listed); 1 - Gravel with at least 70% rounded stones by volume

Structure type - SG - single grain; GR - granular; SAB - subangular blocky; AB - angular blocky; PR - prismatic; PL - platy; MAS - massive

Dev - Development, how well the structure is developed; W - weak; M - moderate; S - strong

Consistence - Soil consistence (strength); L - loose; VFR - very friable; FR - friable; FIR - firm; VFIR - very firm; EXFIR - extremely firm; EXHD - extremely hard

Gley - depth to gleying

SPL - depth to slowly permeable layer

Wetness Class - classification of the soil according to the depth and duration of waterlogging in the soil profile, the higher the class, the longer and at the shallower depth the soil is wet

Overall ALC - this part of the table combines results of the classification for each of the limitations

Soil profile descriptions																		
Survey point	Type	Gradient	Soil disturbed or restored	Horizon	Depth	Texture	Matrix (main) colour			Peat-specific properties					Mottling			
							Hue	Value	Chroma	Von Post	Water content (B)	Fine fibre content (F)	Coarse fibre content (R)	Wood remains (W)	Abundance up to %	Hue	Value	Chroma
1	Core	0	no	1	30	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	71	MCL	2.5Y	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	C	10YR	7	3	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				4														
				5														
2	Core	1	no	1	33	MCL	10YR	2	2	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	73	MCL	2.5Y	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	C	10YR	7	3	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				4														
				5														
3	Core	3	no	1	22	HCL	10YR	2	2	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	60	MCL	2.5Y	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	C	10YR	7	3	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				4														
				5														
4	Core	0	no	1	30	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	35	C	10YR	6	4	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				3	120	C	10YR	7	3	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				4														
				5														
5	Core	3	no	1	40	MCL	10YR	2	2	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	65	MCL	2.5Y	6	1	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	C	10YR	7	3	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				4														
				5														
6	Pit	0	no	1	25	HCL	10YR	3	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	65	HCL	10YR	5	6	n/a	n/a	n/a	n/a	n/a	40	10YR	4	2
				3	120	C	2.5Y	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				4														
				5														
7	Core	1	no	1	34	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	72	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	100	10YR	6	6
				4														
				5														
8	Core	1	no	1	32	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	73	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	100	10YR	6	6
				4														
				5														
9	Core	0	no	1	23	HCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	62	HCL	2.5YR	5	4	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	SCL	2.5Y	5	4	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
10	Core	2	no	1	26	HCL	10YR	5	1	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	63	HCL	2.5Y	6	3	n/a	n/a	n/a	n/a	n/a	40	5Y	7	1
				3	120	C	5Y	7	1	n/a	n/a	n/a	n/a	n/a	40	2.5Y	6	6
				4														
				5														
11	Core	3	no	1	40	HCL	10YR	5	1	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	82	HCL	2.5Y	6	3	n/a	n/a	n/a	n/a	n/a	40	5Y	7	1
				3	120	C	5Y	7	1	n/a	n/a	n/a	n/a	n/a	40	2.5Y	6	6
				4														
				5														
12	Core	3	no	1	41	HCL	10YR	5	1	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	85	HCL	2.5Y	6	3	n/a	n/a	n/a	n/a	n/a	40	5Y	7	1
				3	120	C	5Y	7	1	n/a	n/a	n/a	n/a	n/a	40	2.5Y	6	6
				4														
				5														
14	Pit	0	no	1	35	HCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	60	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	40	10YR	6	8
				3	100	HCL	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	8
				4														
				5														
15	Core	2	no	1	35	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	71	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	100	10YR	6	6
				4														
				5														
16	Core	2	no	1	26	HCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	75	HCL	2.5YR	5	4	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
17	Core	1	no	1	28	HCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	53	HCL	2.5Y	5	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	SCL	2.5Y	5	4	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
				1	40	C	10YR	5	1	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	81	HCL	2.5Y	6	3	n/a	n/a	n/a	n/a	n/a	40	5Y	7	1

Soil profile descriptions continued																		
Survey point	Ped faces				FeMn up to %	Biopores	Stones and rocks			Structure			Consistence	Calcareous	Gleying	SPL	Notes	
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Development	Ped size						
1	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FR	no	NO	-		
	no	n/a	n/a	n/a	0	yes	0	0	n/a	PR	W	C	FIR	no	YES			
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	M	FIR	no	YES			
2	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FR	no	NO	-		
	no	n/a	n/a	n/a	0	yes	0	0	n/a	PR	W	C	FIR	no	YES			
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	M	FIR	no	YES			
3	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FR	no	NO	-		
	yes	10YR	5	4	0	yes	0	0	n/a	PR	W	C	FIR	no	YES			
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	M	FIR	no	YES			
4	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	C	FIR	no	NO	-		
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	W	C	FIR	no	NO			
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	M	FIR	no	YES			
5	no	n/a	n/a	n/a	0	yes	0	0	n/a	AB	M	M	FR	no	NO	-		
	yes	2.5Y	6	3	0	no	0	0	n/a	PR	M	C	VFIR	no	YES			
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	M	FIR	no	YES			
6	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	M	FIR	no	NO	-		
	no	n/a	n/a	n/a	0	yes	0	0	n/a	PR	M	C	VFIR	no	NO			
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	VC	VFIR	no	YES			
7	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	S	M	FIR	no	NO	-		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	VFIR	no	YES			
	no	n/a	n/a	n/a	20	no	0	0	n/a	PR	S	VC	VFIR	no	YES			
8	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	S	M	FIR	no	NO	-		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	VFIR	no	YES			
	no	n/a	n/a	n/a	20	no	0	0	n/a	PR	S	VC	VFIR	no	YES			
9	no	n/a	n/a	n/a	0	yes	0	0	n/a	GR	M	M	FR	no	NO	-		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	M	M	FR	no	NO			
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	C	FR	no	NO			
10	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	-		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	EXFIR	no	NO			
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO			
11	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	-		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	EXFIR	no	NO			
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO			
12	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	-		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	EXFIR	no	NO			
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO			
14	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	C	FR	no	NO	-		
	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	C	FIR	no	YES			
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	W	C	VFIR	no	NO			
15	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	-		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	VFIR	no	YES			
	no	n/a	n/a	n/a	20	no	0	0	n/a	PR	S	VC	VFIR	no	YES			
16	no	n/a	n/a	n/a	0	yes	0	0	n/a	GR	M	M	FR	no	NO	-		
	no	n/a	n/a	n/a	20	no	0	0	n/a	PR	M	M	FR	no	NO			
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	VFIR	no	YES			
17	no	n/a	n/a	n/a	0	yes	5	0	H	SAB	M	M	FR	no	NO	-		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	W	C	VFIR	no	YES			
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	C	FR	no	NO			
	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	VFIR	no	NO			
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	EXFIR	no	NO			
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	EXFIR	no	NO			

ALC for areas represented by individual survey points													
Survey point	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Other (see "Limited by" column)	ALC Grade	Limited by
1	2	1	1	1	1	1	1	1	2	3a	1	3a	Droughtiness
2	2	1	1	1	1	1	1	1	2	3a	1	3a	Droughtiness
3	2	1	1	1	1	1	1	1	3a	2	1	3a	Wetness
4	2	1	1	1	1	1	1	1	3a	1	1	3a	Wetness
5	3	1	1	1	1	1	1	1	3a	2	1	3a	Wetness
6	2	1	1	1	1	1	1	1	3a	3a	3b	3b	Pattern
7	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
8	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
9	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
10	3	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
11	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
12	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
14	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
15	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
16	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
17	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness

Soil profile descriptions																		
Survey point	Type	Gradient	Soil disturbed or restored	Horizon	Depth	Texture	Matrix (main) colour			Peat-specific properties					Mottling			
							Hue	Value	Chroma	Von Post	Water content (B)	Fine fibre content (F)	Coarse fibre content (R)	Wood remains (W)	Abundance up to %	Hue	Value	Chroma
18	Core	0	no	3 4 5	120	C	5Y	7	1	n/a	n/a	n/a	n/a	n/a	40	2.5Y	6	6
19	Core	1	no	1	33	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	69	HZCL	10YR	7	4	n/a	n/a	n/a	n/a	n/a	20	10YR	5	8
				3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				4														
				5														
20	Pit	0	no	1	30	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	55	HZCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	8
				4														
				5														
21	Core	1	no	1	27	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	50	HZCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
22	Core	1	no	1	25	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	52	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
23	Core	2	no	1	35	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	70	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	100	10YR	6	6
				4														
				5														
24	Core	5	no	1	33	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	70	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
25	Core	0	no	1	29	HCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	52	HCL	2.5Y	5	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	95	SCL	2.5Y	5	4	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
26	Core	1	no	1	36	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	69	HCL	10YR	7	4	n/a	n/a	n/a	n/a	n/a	20	10YR	5	8
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				4														
				5														
27	Core	1	no	1	37	HCL	10YR	5	4	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	57	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	100	10YR	5	6
				4														
				5														
28	Core	1	no	1	27	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	49	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
29	Core	1	no	1	26	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	51	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
30	Pit	1	no	1	40	MCL	10YR	4	4	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	60	MCL	2.5Y	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	HCL	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
31	Core	6	no	1	39	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	71	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	2.5YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
32	Core	2	no	1	36	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	74	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	2.5YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
33	Core	1	no	1	37	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	75	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	2.5YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
34	Core	0	no	1	35	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	6
				2	71	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														

Soil profile descriptions continued																		
Survey point	Ped faces				FeMn up to %	Biopores	Stones and rocks			Structure			Consistence	Calcareous	Gleying	SPL	Notes	
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Development	Ped size						
18	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	NO	-	
19	no	n/a	n/a	n/a	2	yes	0	0	n/a	AB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	W	M	FIR	no	YES	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
20	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	yes	0	0	n/a	AB	M	C	VFIR	no	YES	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
21	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
22	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
23	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	S	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	20	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
24	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	S	M	FIR	no	NO	NO	firm subsoil	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	20	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
25	no	n/a	n/a	n/a	0	yes	0	0	n/a	GR	M	M	FR	no	NO	NO	-	
	no	n/a	n/a	n/a	40	no	0	0	n/a	AB	M	M	VFIR	no	YES	NO		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	W	C	FR	no	NO	YES		
26	no	n/a	n/a	n/a	2	yes	0	0	n/a	AB	M	M	FIR	no	NO	NO	lesser 2nd horizon	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
27	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	40	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	FIR	no	YES	YES		
28	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
29	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
30	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	S	C	FR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	YES	NO		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
31	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	yes	0	5	SS	AB	M	C	EXFIR	no	NO	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
32	no	n/a	n/a	n/a	0	yes	10	0	SS	SAB	M	M	FIR	no	NO	NO	stone abundant	
	no	n/a	n/a	n/a	0	yes	5	10	SS	AB	M	C	EXFIR	no	NO	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
33	no	n/a	n/a	n/a	1	yes	10	0	SS	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	yes	5	5	SS	AB	M	C	EXFIR	no	NO	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
34	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	5	0	SS	AB	M	C	EXFIR	no	NO	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		

ALC for areas represented by individual survey points													
Survey point	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Other (see "Limited by" column)	ALC Grade	Limited by
18	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
19	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
20	3	1	1	1	1	1	1	1	3a	2	1	3a	Wetness
21	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
22	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
23	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
24	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
25	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
26	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
27	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
28	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
29	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
30	2	1	1	1	1	1	1	1	2	1	1	2	Wetness
31	2	1	1	1	1	1	1	1	2	2	1	2	Wetness Droughtiness
32	2	1	1	1	1	1	1	2	2	3a	1	3a	Droughtiness
33	2	1	1	1	1	1	1	2	2	3a	1	3a	Droughtiness
34	3	1	1	1	1	1	1	1	3a	3a	1	3a	Wetness Droughtiness

Soil profile descriptions																		
Survey point	Type	Gradient	Soil disturbed or restored	Horizon	Depth	Texture	Matrix (main) colour			Peat-specific properties					Mottling			
							Hue	Value	Chroma	Von Post	Water content (B)	Fine fibre content (F)	Coarse fibre content (R)	Wood remains (W)	Abundance up to %	Hue	Value	Chroma
				5														
35	Core	0	no	1	32	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	6
				2	72	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
36	Core	1	no	1	36	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	78	C	10YR	7	4	n/a	n/a	n/a	n/a	n/a	20	10YR	5	8
				3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				4														
				5														
37	Core	1	no	1	35	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	76	C	10YR	7	4	n/a	n/a	n/a	n/a	n/a	20	10YR	5	8
				3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				4														
				5														
38	Core	1	no	1	38	HCL	10YR	5	4	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	56	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				3	120	HCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	100	10YR	5	6
				4														
				5														
39	Core	1	no	1	35	HCL	10YR	5	4	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	55	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				3	120	HCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	100	10YR	5	6
				4														
				5														
40	Core	5	no	1	22	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	55	C	10YR	7	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	HCL	10YR	7	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
41	Core	2	no	1	23	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	51	C	10YR	7	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	HCL	10YR	7	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
42	Core	2	no	1	39	HCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	73	C	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	2.5YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
43	Pit	1	no	1	29	HCL	10YR	4	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	69	HCL	10YR	6	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
44	Core	0	no	1	32	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	45	MCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
45	Core	3	no	1	36	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	6
				2	54	MCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
46	Core	0	no	1	28	MCL	10YR	3	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	70	MCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
47	Pit	2	no	1	25	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	68	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
48	Pit	1	no	1	45	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	70	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
49	Core	2	no	1	31	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	80	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
50	Core	0	no	1	38	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	85	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
				1	31	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6

Soil profile descriptions continued																			
Survey point	Ped faces				FeMn up to %	Biopores	Stones and rocks			Structure				Consistence	Calcareous	Gleying	SPL	Notes	
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Development	Ped size							
35	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-		
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	M	C	EXFIR	no	NO	YES			
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES			
36	no	n/a	n/a	n/a	2	yes	0	0	n/a	AB	M	M	FIR	no	NO	NO	-		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES			
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES			
37	no	n/a	n/a	n/a	2	yes	0	0	n/a	AB	M	M	FIR	no	NO	NO	-		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES			
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES			
38	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	firm topsoil		
	no	n/a	n/a	n/a	40	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES			
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	FIR	no	YES	YES			
39	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-		
	no	n/a	n/a	n/a	40	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES			
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	FIR	no	YES	YES			
40	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	NO	-		
	no	n/a	n/a	n/a	0	yes	0	0	n/a	PR	M	C	VFIR	no	YES	YES			
	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES			
41	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	NO	-		
	no	n/a	n/a	n/a	0	yes	0	0	n/a	PR	M	C	VFIR	no	YES	YES			
	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES			
42	no	n/a	n/a	n/a	0	yes	5	0	SS	SAB	M	M	FIR	no	NO	NO	-		
	no	n/a	n/a	n/a	0	yes	10	5	SS	AB	M	C	EXFIR	no	NO	NO			
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES			
43	no	n/a	n/a	n/a	0	yes	5	0	SS	SAB	S	M	FIR	no	NO	NO	-		
	no	n/a	n/a	n/a	0	yes	5	0	SS	PR	M	C	VFIR	no	NO	NO			
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES			
44	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FR	no	NO	NO	-		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	VFIR	no	YES	YES			
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES			
45	no	n/a	n/a	n/a	2	yes	0	0	n/a	GR	M	M	FIR	no	NO	NO	-		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	VFIR	no	YES	YES			
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES			
46	no	n/a	n/a	n/a	0	yes	5	0	SS	SAB	M	M	FIR	no	NO	NO	-		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	VFIR	no	YES	YES			
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES			
47	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	W	C	FIR	no	NO	NO	-		
	no	n/a	n/a	n/a	20	yes	0	0	n/a	AB	M	F	FIR	no	YES	YES			
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES			
48	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	C	VFIR	no	YES	YES			
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES			
49	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	C	VFIR	no	YES	YES			
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	NO			
50	no	n/a	n/a	n/a	0	yes	0	0	n/a	GR	M	M	FR	no	NO	NO	-		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	C	VFIR	no	YES	YES			
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	NO			
	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO			

ALC for areas represented by individual survey points													
Survey point	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Other (see "Limited by" column)	ALC Grade	Limited by
35	3	1	1	1	1	1	1	1	3a	3a	1	3a	Wetness Droughtiness
36	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
37	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
38	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
39	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
40	3	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
41	3	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
42	2	1	1	1	1	1	1	1	3a	3a	1	3a	Wetness Droughtiness
43	2	1	1	1	1	1	1	1	3a	3a	1	3a	Wetness Droughtiness
44	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
45	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
46	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
47	3	1	1	1	1	1	1	1	3a	2	1	3a	Wetness
48	3	1	1	1	1	1	1	1	3a	2	1	3a	Wetness
49	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
50	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness

Soil profile descriptions																		
Survey point	Type	Gradient	Soil disturbed or restored	Horizon	Depth	Texture	Matrix (main) colour			Peat-specific properties					Mottling			
							Hue	Value	Chroma	Von Post	Water content (B)	Fine fibre content (F)	Coarse fibre content (R)	Wood remains (W)	Abundance up to %	Hue	Value	Chroma
51	Core	1	no	2	51	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
52	Core	1	no	1	35	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	75	HCL	10YR	7	4	n/a	n/a	n/a	n/a	n/a	20	10YR	5	8
				3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				4														
				5														
53	Core	1	no	1	37	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	78	HCL	10YR	7	4	n/a	n/a	n/a	n/a	n/a	20	10YR	5	8
				3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				4														
				5														
54	Core	1	no	1	36	HCL	10YR	5	4	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	59	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	5	6
				3	120	HCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	100	10YR	5	6
				4														
				5														
55	Core	1	no	1	28	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	75	HCL	10YR	7	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
56	Core	4	no	1	38	C	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	75	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	2.5YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
57	Core	1	no	1	39	C	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	77	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	2.5YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
58	Core	3	no	1	37	C	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	71	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	2.5YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
59	Core	3	no	1	27	MCL	10YR	3	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	54	HCL	2.5Y	5	6	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				3	120	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
60	Core	1	no	1	38	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	60	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
61	Core	0	no	1	32	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	63	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
62	Pit	2	no	1	25	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	71	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	8
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
63	Core	3	no	1	29	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	95	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	8
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
64	Core	3	no	1	34	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	69	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	8
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
65	Core	0	no	1	40	MCL	10YR	3	4	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	70	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	8
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
66	Core	0	no	1	42	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	75	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	8
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
67	Core	0	no	1	41	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	75	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	8
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6

Soil profile descriptions continued																		
Survey point	Ped faces				FeMn up to %	Biopores	Stones and rocks			Structure			Consistence	Calcareous	Gleying	SPL	Notes	
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Development	Ped size						
51	no no	n/a n/a	n/a n/a	n/a n/a	2 0	no no	0 0	0 0	n/a n/a	AB PR	S S	C VC	VFIR EXFIR	no no	YES NO	YES YES	-	
52	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	2 2 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	AB PR PR	M S S	M C VC	FIR VFIR EXFIR	no no no	NO YES YES	NO YES YES	Flat field	
53	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	2 2 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	AB PR PR	M S S	M C VC	FIR VFIR EXFIR	no no no	NO YES YES	NO YES YES	-	
54	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	2 40 2	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB AB PR	M M S	M VC VC	FIR VFIR FIR	no no no	NO YES YES	NO YES YES	bright orange mottles over grey. Topsoil structure firm	
55	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 0 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB AB PR	M M S	M VC VC	FIR VFIR VFIR	no no no	NO NO YES	NO YES YES	-	
56	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 0 0	yes yes no	5 10 5	0 5 0	SS SS SS	SAB AB AB	M M S	M C C	FIR EXFIR VFIR	no no no	NO NO YES	NO NO YES	-	
57	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 0 0	yes yes no	5 10 0	0 5 0	SS SS n/a	SAB AB AB	M M S	M C C	FIR EXFIR VFIR	no no no	NO NO YES	NO NO YES	-	
58	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 0 0	yes yes no	5 10 0	5 10 0	SS SS n/a	SAB AB AB	M M S	M C C	FIR EXFIR VFIR	no no no	NO NO YES	NO NO YES	-	
59	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 2 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	AB AB PR	M M M	M C C	FR VFIR EXFIR	no no no	NO NO YES	NO YES YES	-	
60	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 20 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB PR PR	M M M	M C C	FR EXFIR EXFIR	no no no	NO YES YES	NO YES YES	-	
61	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 20 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB PR PR	M M M	M C C	FR EXFIR EXFIR	no no no	NO YES YES	NO YES YES	-	
62	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 20 0	yes no no	0 5 0	0 5 0	n/a H n/a	SAB PR PR	M M M	M C C	FIR VFIR EXFIR	no no no	NO YES YES	NO YES YES	-	
63	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 20 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB PR PR	M M M	M C C	FIR VFIR EXFIR	no no no	NO YES YES	NO YES NO	-	
64	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 20 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB SAB PR	M M M	M M C	FIR VFIR EXFIR	no no no	NO YES YES	NO NO YES	-	
65	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 20 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB AB PR	M M S	M C C	FIR VFIR VFIR	no no no	NO YES YES	NO YES YES	-	
66	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 20 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB AB PR	M M S	M C C	FIR VFIR VFIR	no no no	NO YES YES	NO YES YES	-	
67	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 20 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	GR AB PR	M M S	M C C	FR VFIR VFIR	no no no	NO YES YES	NO YES YES	-	

ALC for areas represented by individual survey points													
Survey point	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Other (see "Limited by" column)	ALC Grade	Limited by
51	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
52	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
53	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
54	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
55	3	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
56	2	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
57	2	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
58	2	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
59	3	1	1	1	1	1	1	1	3a	2	1	3a	Wetness
60	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
61	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
62	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
63	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
64	3	1	1	1	1	1	1	1	3a	1	1	3a	Wetness
65	3	1	1	1	1	1	1	1	3a	2	1	3a	Wetness
66	3	1	1	1	1	1	1	1	3a	2	1	3a	Wetness
67	3	1	1	1	1	1	1	1	3a	2	1	3a	Wetness

Soil profile descriptions																		
Survey point	Type	Gradient	Soil disturbed or restored	Horizon	Depth	Texture	Matrix (main) colour			Peat-specific properties					Mottling			
							Hue	Value	Chroma	Von Post	Water content (B)	Fine fibre content (F)	Coarse fibre content (R)	Wood remains (W)	Abundance up to %	Hue	Value	Chroma
				4 5														
68	Core	3	no	1	33	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	54	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
69	Core	1	no	1	32	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	52	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
70	Pit	0	no	1	30	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	53	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
71	Core	1	no	1	33	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	55	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
72	Core	1	no	1	35	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	75	C	10YR	7	4	n/a	n/a	n/a	n/a	n/a	20	10YR	5	8
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				4														
				5														
73	Core	1	no	1	38	HCL	10YR	5	4	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	51	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	6
				4														
				5														
74	Core	4	no	1	31	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	58	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				4														
				5														
75	Pit	1	no	1	30	SCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	60	SCL	10YR	6	6	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				4														
				5														
76	Core	3	no	1	38	SCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	75	SCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				4														
				5														
77	Core	0	no	1	36	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	69	MCL	10YR	4	4	n/a	n/a	n/a	n/a	n/a	2	10YR	7	6
				3	120	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
78	Pit	0	no	1	30	MCL	7.5YR	4	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	60	C	10YR	6	6	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				3	100	C	5Y	7	1	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
79	Core	0	no	1	34	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	70	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	100	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	6	6
				4														
				5														
80	Core	0	no	1	31	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	71	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	6	6
				4														
				5														
81	Core	0	no	1	30	HCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	50	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	SCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
82	Core	0	no	1	35	MCL	2.5Y	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	82	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
83	Core	0	no	1	35	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	72	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														

Soil profile descriptions continued																		
Survey point	Ped faces				FeMn up to %	Biopores	Stones and rocks			Structure			Consistence	Calcareous	Gleying	SPL	Notes	
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Development	Ped size						
68	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
69	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
70	no	n/a	n/a	n/a	1	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
71	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
72	no	n/a	n/a	n/a	2	yes	0	0	n/a	AB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
73	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	S	M	FR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
74	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	S	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	yes	0	0	n/a	AB	M	C	FIR	no	NO	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	C	VFIR	no	NO	YES		
75	no	n/a	n/a	n/a	0	yes	10	0	CH	AB	M	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	yes	35	20	CH	AB	M	C	VFIR	no	NO	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	C	VFIR	no	NO	YES		
76	no	n/a	n/a	n/a	0	yes	10	0	SS	SAB	S	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	5	10	CH	AB	M	C	VFIR	no	NO	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	C	VFIR	no	NO	YES		
77	no	n/a	n/a	n/a	0	yes	5	0	SS	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	M	FIR	no	NO	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
78	no	n/a	n/a	n/a	0	yes	10	0	SS	SAB	M	F	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	yes	5	5	SS	SAB	M	M	FIR	no	NO	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	W	F	FR	no	YES	YES		
79	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	W	F	FR	no	NO	YES		
80	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	0	M	FR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	W	F	FR	no	YES	YES		
81	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	M	VFIR	no	YES	YES		
82	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	M	VFIR	no	YES	NO		
83	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	S	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	M	VFIR	no	YES	YES		

ALC for areas represented by individual survey points													
Survey point	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Other (see "Limited by" column)	ALC Grade	Limited by
68	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
69	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
70	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
71	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
72	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
73	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
74	2	1	1	1	1	1	1	1	3a	2	1	3a	Wetness
75	2	1	1	1	1	1	1	2	2	3a	1	3a	Droughtiness
76	3	1	1	1	1	1	1	2	3a	2	1	3a	Wetness
77	2	1	1	1	1	1	1	1	2	2	1	2	Wetness Droughtiness
78	2	1	1	1	1	1	1	2	2	2	1	2	Topsoil stoniness Wetness Droughtiness
79	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
80	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
81	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
82	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
83	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness

Soil profile descriptions																		
Survey point	Type	Gradient	Soil disturbed or restored	Horizon	Depth	Texture	Matrix (main) colour			Peat-specific properties					Mottling			
							Hue	Value	Chroma	Von Post	Water content (B)	Fine fibre content (F)	Coarse fibre content (R)	Wood remains (W)	Abundance up to %	Hue	Value	Chroma
84	Core	0	no	1	37	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	82	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
85	Core	0	no	1	37	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	75	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
86	Core	0	no	1	30	MCL	2.5Y	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	69	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
87	Core	1	no	1	33	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	55	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
88	Core	3	no	1	30	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				2	53	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
89	Core	2	no	1	36	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	56	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
90	Core	1	no	1	25	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				2	53	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
91	Core	2	no	1	25	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				2	57	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
92	Core	1	no	1	33	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	77	C	10YR	7	4	n/a	n/a	n/a	n/a	n/a	20	10YR	5	8
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				4														
				5														
93	Core	1	no	1	40	HCL	10YR	5	4	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	51	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	6
				4														
				5														
93.1	Pit	3	no	1	26	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	45	C	10YR	7	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
94	Core	3	no	1	30	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	59	C	10YR	7	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				4														
				5														
95	Core	2	no	1	39	C	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	73	C	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
96	Core	0	no	1	30	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	73	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
97	Core	1	no	1	38	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	71	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
98	Core	2	no	1	41	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	68	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				3	120	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
				1	30	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	53	MCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8

Soil profile descriptions continued																		
Survey point	Ped faces				FeMn up to %	Biopores	Stones and rocks			Structure			Consistence	Calcareous	Gleying	SPL	Notes	
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Development	Ped size						
84	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	S	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	M	VFIR	no	YES	NO		
85	no	n/a	n/a	n/a	0	yes	0	0	n/a	GR	M	M	FR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	M	VFIR	no	YES	YES		
86	no	n/a	n/a	n/a	0	yes	0	0	n/a	GR	M	F	FR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	M	VFIR	no	YES	YES		
87	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
88	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	YES	NO	slight water logging patch	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
89	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	yes	0	0	n/a	PR	S	VC	VFIR	no	YES	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
90	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	YES	NO	mottling in 1-2 horizon then nearly pure grey in 3	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
91	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	YES	NO	poached cattle field	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
92	no	n/a	n/a	n/a	2	yes	0	0	n/a	AB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
93	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	S	M	FR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	yes	0	0	n/a	AB	M	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
93.1	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
94	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	yes	0	0	n/a	AB	M	C	FIR	no	YES	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	C	VFIR	no	NO	YES		
95	no	n/a	n/a	n/a	0	yes	10	0	SS	SAB	S	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	5	10	SS	AB	M	C	EXFIR	no	NO	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
96	no	n/a	n/a	n/a	0	yes	10	5	SS	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	10	SS	AB	M	C	EXFIR	no	NO	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
97	no	n/a	n/a	n/a	0	yes	15	0	SS	SAB	M	C	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	10	SS	AB	M	C	EXFIR	no	NO	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
98	no	n/a	n/a	n/a	2	yes	5	0	SS	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	10	SS	AB	M	C	EXFIR	no	NO	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	yes	5	0	SS	SAB	M	M	VFIR	no	NO	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	EXFIR	no	YES	YES		

ALC for areas represented by individual survey points													
Survey point	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Other (see "Limited by" column)	ALC Grade	Limited by
84	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
85	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
86	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
87	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
88	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
89	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
90	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
91	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
92	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
93	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
93.1	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
94	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
95	3	1	1	1	1	1	1	2	3b	3a	1	3b	Wetness
96	3	1	1	1	1	1	1	2	3a	3a	1	3a	Wetness Droughtiness
97	3	1	1	1	1	1	1	3a	3a	3a	1	3a	Topsoil stoniness Wetness Droughtiness
98	3	1	1	1	1	1	1	1	3a	3a	1	3a	Wetness Droughtiness

Soil profile descriptions																		
Survey point	Type	Gradient	Soil disturbed or restored	Horizon	Depth	Texture	Matrix (main) colour			Peat-specific properties					Mottling			
							Hue	Value	Chroma	Von Post	Water content (B)	Fine fibre content (F)	Coarse fibre content (R)	Wood remains (W)	Abundance up to %	Hue	Value	Chroma
99	Core	3	no	3 4 5	120	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
100	Core	0	no	1	32	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	65	MCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
101	Core	1	no	1	42	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	85	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
102	Core	0	no	1	26	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	45	C	10YR	7	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
103	Pit	1	no	1	24	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	46	HCL	10YR	7	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	2.5Y	7	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	8
				4														
				5														
104	Core	0	no	1	25	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	47	C	10YR	7	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	2.5Y	7	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	8
				4														
				5														
105	Core	0	no	1	29	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	45	C	10YR	7	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	2.5Y	7	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	8
				4														
				5														
106	Pit	0	no	1	26	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	48	HZCL	10YR	7	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	HZCL	2.5Y	6	4	n/a	n/a	n/a	n/a	n/a	40	10YR	6	8
				4														
				5														
107	Core	0	no	1	27	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	45	C	10YR	7	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	2.5Y	6	4	n/a	n/a	n/a	n/a	n/a	40	10YR	6	8
				4														
				5														
108	Core	0	no	1	29	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	55	C	10YR	5	4	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	MCL	2.5Y	5	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	8
				4														
				5														
109	Core	2	no	1	32	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				2	54	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
110	Core	1	no	1	28	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	52	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
111	Core	1	no	1	24	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				2	53	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
112	Core	2	no	1	26	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				2	52	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
113	Core	1	no	1	36	HCL	10YR	5	4	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	52	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	6
				4														
				5														
114	Core	0	no	1	35	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	85	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				3	120	HCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	6
				4														
				5														
115	Core	0	no	1	32	MCL	10YR	3	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	75	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				3	120	HCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	6
				4														

Soil profile descriptions continued																		
Survey point	Ped faces				FeMn up to %	Biopores	Stones and rocks			Structure			Consistence	Calcareous	Gleying	SPL	Notes	
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Development	Ped size						
99	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES	-	
100	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
101	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	VFIR	no	YES	NO		
102	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
103	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	M	F	EXFIR	no	YES	NO		
104	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	M	F	EXFIR	no	YES	NO		
105	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	M	F	EXFIR	no	YES	NO		
106	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	F	EXFIR	no	YES	NO		
107	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	F	EXFIR	no	YES	NO		
108	no	n/a	n/a	n/a	0	yes	5	0	H	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	VFIR	no	NO	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	F	EXFIR	no	YES	NO		
109	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	YES	NO	more mottling in 1st 2nd horizon then 40% in 3rd	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
110	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
111	no	n/a	n/a	n/a	0	yes	5	5	H	SAB	M	M	FIR	no	YES	NO	stones near shed	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
112	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	YES	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
113	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	S	M	FR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
114	no	n/a	n/a	n/a	0	yes	5	0	SS	AB	M	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO		
115	no	n/a	n/a	n/a	0	yes	5	0	SS	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		

ALC for areas represented by individual survey points													
Survey point	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Other (see "Limited by" column)	ALC Grade	Limited by
99	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
100	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
101	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
102	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
103	4	1	1	1	1	1	1	1	3b	1	1	3b	Wetness
104	4	1	1	1	1	1	1	1	3b	1	1	3b	Wetness
105	4	1	1	1	1	1	1	1	3b	1	1	3b	Wetness
106	4	1	1	1	1	1	1	1	3b	1	1	3b	Wetness
107	4	1	1	1	1	1	1	1	3b	1	1	3b	Wetness
108	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
109	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
110	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
111	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
112	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
113	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
114	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
115	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness

Soil profile descriptions																		
Survey point	Type	Gradient	Soil disturbed or restored	Horizon	Depth	Texture	Matrix (main) colour			Peat-specific properties					Mottling			
							Hue	Value	Chroma	Von Post	Water content (B)	Fine fibre content (F)	Coarse fibre content (R)	Wood remains (W)	Abundance up to %	Hue	Value	Chroma
				5														
116	Core	2	no	1	34	MCL	10YR	4	2	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	62	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				3	120	HCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	6
				4														
				5														
117	Core	3	no	1	33	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	68	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				3	120	HCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	6
				4														
				5														
118	Core	1	no	1	41	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	81	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
119	Core	1	no	1	41	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	84	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
120	Core	1	no	1	44	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	83	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
121	Core	1	no	1	43	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	80	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
121	Core	1	no	1	43	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	80	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
122	Core	0	no	1	32	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	56	MCL	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
123	Core	2	no	1	43	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	80	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
123	Core	2	no	1	43	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	80	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
124	Core	0	no	1	31	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	2	5Y	3	1
				2	58	HCL	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
125	Core	0	no	1	32	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	70	MCL	2.5YR	6	1	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
126	Core	0	no	1	31	HCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	79	MCL	2.5YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
127	Core	2	no	1	22	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				2	54	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
128	Core	1	no	1	24	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				2	55	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
129	Core	1	no	1	33	HCL	10YR	3	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	75	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
				1	32	MCL	10YR	4	2	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8

Soil profile descriptions continued																		
Survey point	Ped faces				FeMn up to %	Biopores	Stones and rocks			Structure			Consistence	Calcareous	Gleying	SPL	Notes	
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Development	Ped size						
116	no	n/a	n/a	n/a	0	yes	5	0	SS	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	W	M	FIR	no	YES	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
117	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	W	M	FIR	no	YES	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
118	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO		
119	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO		
120	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO		
121	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO		
121	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO		
122	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	M	M	FR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
123	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO		
123	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO		
124	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
125	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	M	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
126	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	W	VC	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
127	no	n/a	n/a	n/a	0	yes	5	0	H	SAB	M	M	FIR	no	YES	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
128	no	n/a	n/a	n/a	0	yes	5	0	H	SAB	M	M	FIR	no	YES	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
129	no	n/a	n/a	n/a	0	yes	5	0	SS	SAB	M	C	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES		
	no	n/a	n/a	n/a	0	yes	5	0	SS	SAB	M	M	FIR	no	NO	NO		

ALC for areas represented by individual survey points													
Survey point	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Other (see "Limited by" column)	ALC Grade	Limited by
116	3	1	1	1	1	1	1	1	3a	2	1	3a	Wetness
117	3	1	1	1	1	1	1	1	3a	2	1	3a	Wetness
118	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
119	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
120	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
121	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
121	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
122	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
123	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
123	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
124	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
125	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
126	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
127	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
128	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
129	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness

Soil profile descriptions																		
Survey point	Type	Gradient	Soil disturbed or restored	Horizon	Depth	Texture	Matrix (main) colour			Peat-specific properties					Mottling			
							Hue	Value	Chroma	Von Post	Water content (B)	Fine fibre content (F)	Coarse fibre content (R)	Wood remains (W)	Abundance up to %	Hue	Value	Chroma
130	Core	3	no	2	80	MCL	2.5Y	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	7	6
				4														
				5														
132	Pit	0	no	1	65	HCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	72	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
133	Core	1	no	1	43	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	82	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
134	Core	0	no	1	42	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	95	MCL	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
135	Core	0	no	1	30	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	67	MCL	2.5Y	5	4	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
136	Core	0	no	1	24	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				2	76	MCL	2.5Y	5	4	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
137	Core	4	no	1	35	MCL	10YR	3	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	55	MCL	10YR	7	4	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
138	Core	1	no	1	45	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	82	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
139	Core	1	no	1	44	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	83	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
140	Core	1	no	1	41	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	81	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
142	Pit	0	no	1	55	C	10YR	4	6	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	71	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	4	6
				3	120	C	10YR	3	6	n/a	n/a	n/a	n/a	n/a	40	7.5YR	6	6
				4														
				5														
143	Core	7	no	1	25	HCL	10YR	5	1	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	75	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	2	7.5YR	6	8
				3	120	C	10YR	3	6	n/a	n/a	n/a	n/a	n/a	40	7.5YR	5	8
				4														
				5														
144	Core	1	no	1	23	C	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	62	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	4	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
145	Core	1	no	1	21	C	10YR	5	1	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	60	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	2	7.5YR	6	8
				3	120	C	10YR	3	6	n/a	n/a	n/a	n/a	n/a	100	7.5YR	5	8
				4														
				5														
145	Core	1	no	1	21	C	10YR	5	1	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	60	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	2	7.5YR	6	8
				3	120	C	10YR	3	6	n/a	n/a	n/a	n/a	n/a	100	7.5YR	5	8
				4														
				5														
146	Core	1	no	1	21	C	10YR	5	1	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	72	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	2	7.5YR	6	8
				3	120	C	10YR	3	6	n/a	n/a	n/a	n/a	n/a	40	7.5YR	5	8
				4														
				5														
147	Core	0	no	1	28	MCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	69	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	40	10YR	6	8
				3	120	MCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	7.5YR	5	8

Soil profile descriptions continued																		
Survey point	Ped faces				FeMn up to %	Biopores	Stones and rocks			Structure			Consistence	Calcareous	Gleying	SPL	Notes	
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Development	Ped size						
130	no no	n/a n/a	n/a n/a	n/a n/a	0 0	no no	0 0	0 0	n/a n/a	AB PR	M S	VC VC	EXFIR EXFIR	no no	YES NO	YES NO	-	
132	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	2 20 0	yes no no	0 10 0	0 0 0	n/a SS n/a	SAB SAB PR	M W S	C VC VC	FIR EXFIR EXFIR	no no no	NO YES YES	NO YES YES	-	
133	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 0 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB PR PR	W S S	C VC VC	FIR EXFIR EXFIR	no no no	NO YES YES	NO YES NO	-	
134	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 0 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	GR PR PR	M W S	F VC VC	FR EXFIR EXFIR	no no no	NO YES YES	NO YES NO	-	
135	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 20 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB PR PR	M W S	M VC VC	FIR EXFIR EXFIR	no no no	NO NO YES	NO YES YES	-	
136	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 20 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB PR PR	M W S	M VC VC	FIR EXFIR EXFIR	no no no	YES NO YES	NO YES YES	-	
137	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 0 0	yes no no	5 5 0	0 0 0	SS SS n/a	AB GR PR	M W S	C F VC	VFIR VFR EXFIR	no no no	NO YES YES	NO NO YES	-	
138	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 0 40	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB PR PR	W S S	C VC VC	FIR EXFIR EXFIR	no no no	NO YES YES	NO YES NO	-	
139	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 0 40	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB PR PR	W S S	C VC VC	FIR EXFIR EXFIR	no no no	NO YES YES	NO YES NO	-	
140	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 0 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB PR PR	W S S	C VC VC	FIR EXFIR EXFIR	no no no	NO YES YES	NO YES NO	-	
142	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 2 0	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB PR PR	0 M S	F M VC	EXFIR FIR EXFIR	no no no	NO YES NO	NO YES YES	-	
143	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 2 2	yes yes no	0 0 0	0 0 0	n/a n/a n/a	SAB SAB PR	M M W	C M VC	FIR FIR VFIR	no no no	NO NO NO	NO NO YES	Slightly sloping	
144	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 2 2	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB SAB PR	M S S	M C VC	FIR FIR EXFIR	no no no	NO YES YES	NO NO YES	-	
145	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 2 2	yes yes no	0 0 0	0 0 0	n/a n/a n/a	SAB SAB PR	M M W	C M VC	FIR FIR VFIR	no no no	NO NO NO	NO NO YES	100% mottling in 3rd horizon	
145	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 2 2	yes yes no	0 0 0	0 0 0	n/a n/a n/a	SAB SAB PR	M M W	C M VC	FIR FIR VFIR	no no no	NO NO NO	NO NO YES	100% mottling in 3rd horizon	
146	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 2 2	yes yes no	0 0 0	0 0 0	n/a n/a n/a	SAB SAB PR	M M W	C M VC	FIR FIR VFIR	no no no	NO NO NO	NO NO YES	-	
147	no no no	n/a n/a n/a	n/a n/a n/a	n/a n/a n/a	0 2 2	yes no no	0 0 0	0 0 0	n/a n/a n/a	SAB SAB PR	M M W	M C VC	FR FIR VFIR	no no no	NO YES YES	NO NO YES	-	

ALC for areas represented by individual survey points													
Survey point	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Other (see "Limited by" column)	ALC Grade	Limited by
130	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
132	2	1	1	1	1	1	1	1	3a	2	3b	3b	Pattern
133	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
134	3	1	1	1	1	1	1	1	3a	2	1	3a	Wetness
135	3	1	1	1	1	1	1	1	3a	3a	1	3a	Wetness Droughtiness
136	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
137	3	1	1	1	1	1	1	1	3a	2	3b	3b	Pattern
138	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
139	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
140	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
142	2	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
143	2	1	1	1	1	1	1	1	3a	1	1	3a	Wetness
144	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
145	2	1	1	1	1	1	1	1	3b	1	1	3b	Wetness
145	2	1	1	1	1	1	1	1	3b	1	1	3b	Wetness
146	2	1	1	1	1	1	1	1	3b	1	1	3b	Wetness
147	3	1	1	1	1	1	1	1	3a	2	1	3a	Wetness

Soil profile descriptions																		
Survey point	Type	Gradient	Soil disturbed or restored	Horizon	Depth	Texture	Matrix (main) colour			Peat-specific properties					Mottling			
							Hue	Value	Chroma	Von Post	Water content (B)	Fine fibre content (F)	Coarse fibre content (R)	Wood remains (W)	Abundance up to %	Hue	Value	Chroma
				4 5														
148	Core	0	no	1	28	MCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	5	8
				2	66	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	100	10YR	6	8
				3	120	MCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
149	Core	1	no	1	24	C	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	61	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	4	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
150	Core	1	no	1	23	C	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	61	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	4	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
151	Core	1	no	1	28	C	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	62	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	4	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
152	Core	2	no	1	23	C	10YR	5	1	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	61	MCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	2	7.5YR	6	8
				3	120	C	7.5YR	6	2	n/a	n/a	n/a	n/a	n/a	100	7.5YR	5	8
				4														
				5														
153	Pit	2	no	1	25	SCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	2	7.5YR	3	4
				2	85	SC	10YR	5	3	n/a	n/a	n/a	n/a	n/a	40	7.5YR	5	8
				3	100	C	7.5YR	6	2	n/a	n/a	n/a	n/a	n/a	100	7.5YR	5	8
				4														
				5														
154	Core	1	no	1	31	MCL	10YR	4	3	n/a	n/a	n/a	n/a	n/a	2	10YR	5	2
				2	78	HCL	2.5Y	5	4	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	HCL	5Y	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	8
				4														
				5														
155	Core	2	no	1	39	MCL	10YR	3	3	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	69	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	HCL	5Y	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	8
				4														
				5														
156	Core	2	no	1	23	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	54	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				3	120	HCL	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
157	Core	1	no	1	22	C	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	54	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				3	120	HCL	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
158	Pit	0	no	1	35	C	10YR	3	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	55	C	10YR	5	6	n/a	n/a	n/a	n/a	n/a	40	7.5YR	5	1
				3	100	C	2.5Y	5	3	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				4														
				5														
159	Core	1	no	1	20	C	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	50	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	4	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	100	10YR	4	6
				4														
				5														
160	Core	1	no	1	35	C	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	55	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	4	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
161	Core	1	no	1	23	C	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	60	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	4	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
162	Core	1	no	1	23	C	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	61	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	4	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
164	Core	1	no	1	30	C	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	59	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	4	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														

Soil profile descriptions continued																		
Survey point	Ped faces				FeMn up to %	Biopores	Stones and rocks			Structure				Consistence	Calcareous	Gleying	SPL	Notes
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Development	Ped size						
148	no	n/a	n/a	n/a	2	yes	5	0	H	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	M	C	FIR	no	YES	NO		
	no	n/a	n/a	n/a	20	no	0	0	n/a	PR	W	VC	FIR	no	YES	YES		
149	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	less grey coulor	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	S	C	FIR	no	YES	NO		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
150	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	S	C	FIR	no	YES	NO		
	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
151	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	S	C	FIR	no	YES	NO		
	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
152	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	yes	0	0	n/a	SAB	M	C	FIR	no	NO	NO		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	W	VC	VFIR	no	YES	YES		
153	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	20	no	0	0	n/a	SAB	M	M	VFIR	no	YES	NO		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	W	VC	VFIR	no	YES	NO		
154	no	n/a	n/a	n/a	0	yes	5	0	SS	SAB	M	M	FR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	C	FIR	no	NO	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	M	EXFIR	no	YES	YES		
155	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FR	no	NO	NO	-	
	no	n/a	n/a	n/a	20	no	0	0	n/a	PR	W	C	FIR	no	YES	YES		
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	M	EXFIR	no	YES	YES		
156	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	20	no	0	0	n/a	SAB	S	C	FIR	no	YES	NO		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
157	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	20	no	0	0	n/a	SAB	S	C	FIR	no	YES	NO		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
158	no	n/a	n/a	n/a	20	yes	0	0	n/a	SAB	M	M	VFIR	no	NO	NO	-	
	no	n/a	n/a	n/a	20	no	0	5	H	SAB	M	M	FIR	no	NO	NO		
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	W	C	FIR	no	YES	YES		
159	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	FIR	no	NO	NO	abrupt 3 horizon groundwater gley	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	S	VC	EXFIR	no	YES	NO		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
160	no	n/a	n/a	n/a	0	yes	0	0	n/a	AB	M	C	VFIR	no	NO	NO	poorer structure bare patch in field	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	S	VC	EXFIR	no	YES	NO		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	yes	YES	YES		
161	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	S	C	FIR	no	YES	NO		
	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
162	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	fe abundant in 3	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	S	C	FIR	no	YES	NO		
	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
164	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	S	C	FIR	no	YES	NO		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		

ALC for areas represented by individual survey points													
Survey point	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Other (see "Limited by" column)	ALC Grade	Limited by
148	3	1	1	1	1	1	1	1	3a	2	1	3a	Wetness
149	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
150	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
151	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
152	2	1	1	1	1	1	1	1	3b	1	1	3b	Wetness
153	2	1	1	1	1	1	1	1	2	1	3b	3b	Pattern
154	3	1	1	1	1	1	1	1	3a	3a	1	3a	Wetness Droughtiness
155	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
156	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
157	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
158	2	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
159	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
160	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
161	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
162	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
164	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness

Soil profile descriptions																		
Survey point	Type	Gradient	Soil disturbed or restored	Horizon	Depth	Texture	Matrix (main) colour			Peat-specific properties					Mottling			
							Hue	Value	Chroma	Von Post	Water content (B)	Fine fibre content (F)	Coarse fibre content (R)	Wood remains (W)	Abundance up to %	Hue	Value	Chroma
164	Core	1	no	1	30	C	10YR	5	2	n/a	n/a	n/a	n/a	n/a	0	0	0	0
				2	59	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	4	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
165	Core	3	no	1	29	MCL	10YR	4	2	n/a	n/a	n/a	n/a	n/a	20	5G	4	1
				2	59	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				3	120	HCL	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
166	Core	5	no	1	20	C	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	56	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				3	120	HCL	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
167	Core	1	no	1	23	HCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	58	MCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				3	120	HCL	10YR	7	1	n/a	n/a	n/a	n/a	n/a	100	10YR	4	6
				4														
				5														
168	Core	1	no	1	23	C	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	55	C	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	100	10YR	4	6
				4														
				5														
181	Core	1	no	1	38	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	67	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
182	Core	1	no	1	39	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	71	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
183	Pit	1	no	1	35	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	69	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
184	Core	1	no	1	37	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	69	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
185	Core	1	no	1	35	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	74	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
186	Core	1	no	1	38	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	70	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
187	Core	1	no	1	35	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	71	SCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	SCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	100	10YR	6	6
				4														
				5														
188	Core	1	no	1	36	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	67	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
189	Core	1	no	1	35	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	71	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
190	Core	1	no	1	38	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	70	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
191	Pit	1	no	1	37	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	69	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
				1	38	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	58	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6

Soil profile descriptions continued																		
Survey point	Ped faces				FeMn up to %	Biopores	Stones and rocks			Structure			Consistence	Calcareous	Gleying	SPL	Notes	
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Development	Ped size						
164	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	S	C	FIR	no	YES	NO		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
165	no	n/a	n/a	n/a	0	yes	5	0	H	SAB	M	M	FR	no	NO	NO	-	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	C	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
166	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	FIR	no	NO	NO	stony subsoil	
	no	n/a	n/a	n/a	20	no	10	5	SS	SAB	S	C	FIR	no	YES	NO		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
167	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	C	FIR	no	NO	NO	More brown grey in 3rd	
	no	n/a	n/a	n/a	20	no	0	0	n/a	AB	W	C	FIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	M	VC	VFIR	no	YES	YES		
168	no	n/a	n/a	n/a	2	yes	0	0	n/a	AB	M	C	EXFIR	no	NO	NO	soft rush and poorer structure 3rd horizon brownish grey	
	no	n/a	n/a	n/a	20	no	0	0	n/a	PR	M	C	EXFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES		
181	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
182	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
183	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
184	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
185	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
186	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
187	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	40	no	0	0	n/a	AB	W	C	FIR	no	YES	YES		
188	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
189	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
190	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
191	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		

ALC for areas represented by individual survey points													
Survey point	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Other (see "Limited by" column)	ALC Grade	Limited by
164	3	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
165	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
166	3	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
167	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
168	4	1	1	1	1	1	1	1	3b	3a	1	3b	Wetness
181	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
182	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
183	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
184	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
185	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
186	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
187	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
188	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
189	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
190	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
191	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness

Soil profile descriptions																		
Survey point	Type	Gradient	Soil disturbed or restored	Horizon	Depth	Texture	Matrix (main) colour			Peat-specific properties					Mottling			
							Hue	Value	Chroma	Von Post	Water content (B)	Fine fibre content (F)	Coarse fibre content (R)	Wood remains (W)	Abundance up to %	Hue	Value	Chroma
192	Core	1	no	3 4 5	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
193	Core	1	no	1	36	MCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	71	SCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
194	Core	1	no	1	36	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	72	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
195	Core	1	no	1	39	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	68	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
196	Core	1	no	1	38	HCL	10YR	5	3	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	71	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
197	Core	1	no	1	39	MCL	10YR	5	2	n/a	n/a	n/a	n/a	n/a	2	10YR	6	6
				2	70	SCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				3	120	SCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	100	10YR	6	6
				4														
				5														

Soil profile descriptions continued																		
Survey point	Ped faces				FeMn up to %	Biopores	Stones and rocks			Structure			Consistence	Calcareous	Gleying	SPL	Notes	
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Development	Ped size						
192	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES	-	
193	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	S	C	FIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
194	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
195	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
196	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	C	VFIR	no	YES	YES		
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	VC	VFIR	no	YES	YES		
197	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FIR	no	NO	NO	-	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	S	C	FIR	no	YES	YES		
	no	n/a	n/a	n/a	40	no	0	0	n/a	AB	W	C	FIR	no	YES	YES		

ALC for areas represented by individual survey points													
Survey point	Wetness class	Climate	Gradient	Summer flood risk	Winter flood risk	Topsoil texture	Soil Depth	Topsoil stoniness	Wetness	Droughtiness	Other (see "Limited by" column)	ALC Grade	Limited by
192	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
193	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
194	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
195	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
196	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness
197	4	1	1	1	1	1	1	1	3b	2	1	3b	Wetness

Appendix 2: Soil Texture Laboratory Results



ANALYTICAL REPORT

Report Number	79919-21	H448	WARDELL ARMSTRONG LLP
Date Received	10-DEC-2021		CITY QUADRANT
Date Reported	20-DEC-2021		11 WATERLOO SQUARE
Project	GM12014GMEM		NEWCASTLE UPON TYNE
Reference	KIRSTY ELLIOTT		NE1 4DP
Order Number	NT54484		

Laboratory Reference		SOIL538505	SOIL538506	SOIL538507	SOIL538508	SOIL538509	SOIL538510	SOIL538511	SOIL538512	SOIL538513	SOIL538514
Sample Reference		117 T/S AUGER	126 T/S AUGER	129 T/S AUGER	132 T/S H1 5-25	132 S/S H2 60-70	137 U S/S AUGER	137 L S/S AUGER	142 T/S H1 10-30	153 T/S H1 5-25	153 U S/S H2 40-60
Determinand	Unit	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sand 2.00-0.063mm	% w/w	41	24	49	29	8	38	43	14	53	52
Silt 0.063-0.002mm	% w/w	34	46	23	40	40	43	40	41	21	15
Clay <0.002mm	% w/w	25	30	28	31	52	19	17	45	26	33
Textural Class **		MCL	HCL	HCL	HCL	C	MCL	SZL	C	SCL	SC

Notes	
Analysis Notes	The sample submitted was of adequate size to complete all analysis requested. The results as reported relate only to the item(s) submitted for testing. The results are presented on a dry matter basis unless otherwise stipulated.
Document Control	This test report shall not be reproduced, except in full, without the written approval of the laboratory.

** Please see the attached document for the definition of textural classes.	
Reported by	██████████ Natural Resource Management, a trading division of Cawood Scientific Ltd. Coopers Bridge, Braziers Lane, Bracknell, Berkshire, RG42 6NS Tel: 01344 886338 Fax: 01344 890972 email: enquiries@nrm.uk.com



ANALYTICAL REPORT

Report Number	79917-21	H448	WARDELL ARMSTRONG LLP
Date Received	10-DEC-2021		CITY QUADRANT
Date Reported	16-DEC-2021		11 WATERLOO SQUARE
Project	GM12014GMEM		NEWCASTLE UPON TYNE
Reference	KIRSTY ELLIOTT		NE1 4DP
Order Number	NT54484		

Laboratory Reference		SOIL538485	SOIL538486	SOIL538487	SOIL538488	SOIL538489	SOIL538490	SOIL538491	SOIL538492	SOIL538493	SOIL538494
Sample Reference		14 T/S H1 5-25	20 T/S H1 5-25	20 U S/S H2 30-50	30 T/S H1 5-25	30 U S/S H2	47 T/S H1 5-25	47 S/S H2 35-55	62 T/S H1 0-20	62 U S/S H2 35-55	70 T/S H1 5-25
Determinand	Unit	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sand 2.00-0.063mm	% w/w	23	20	11	47	39	38	29	44	44	29
Silt 0.063-0.002mm	% w/w	44	55	57	32	36	38	47	30	29	44
Clay <0.002mm	% w/w	33	25	32	21	25	24	24	26	27	27
Textural Class **		HCL	MCL/MZCL	HZCL	MCL	MCL	MCL	MCL	MCL	HCL	HCL

Notes	
Analysis Notes	The sample submitted was of adequate size to complete all analysis requested. The results as reported relate only to the item(s) submitted for testing. The results are presented on a dry matter basis unless otherwise stipulated.
Document Control	This test report shall not be reproduced, except in full, without the written approval of the laboratory.

Reported by	** Please see the attached document for the definition of textural classes. [REDACTED] Natural Resource Management, a trading division of Cawood Scientific Ltd. Coopers Bridge, Braziers Lane, Bracknell, Berkshire, RG42 6NS Tel: 01344 886338 Fax: 01344 890972 email: enquiries@nrm.uk.com
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ANALYTICAL REPORT

Report Number	79918-21	H448	WARDELL ARMSTRONG LLP
Date Received	10-DEC-2021		CITY QUADRANT
Date Reported	17-DEC-2021		11 WATERLOO SQUARE
Project	GM12014GMEM		NEWCASTLE UPON TYNE
Reference	KIRSTY ELLIOTT		NE1 4DP
Order Number	NT54484		

Laboratory Reference		SOIL538495	SOIL538496	SOIL538497	SOIL538498	SOIL538499	SOIL538500	SOIL538501	SOIL538502	SOIL538503	SOIL538504
Sample Reference		75 T/S H1 5-25	78 T/S H1 5-25	78 U S/S H2 35-55	78 L S/S H3	103 T/S H1 5-25	103 U S/S H2 35-55	103 L S/S H3 65-70	106 T/S H1 5-25	106 U S/S H2 30-50	106 L S/S H3 60-70
Determinand	Unit	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Sand 2.00-0.063mm	% w/w	51	47	20	20	20	27	13	21	19	12
Silt 0.063-0.002mm	% w/w	22	24	29	28	46	40	39	49	50	58
Clay <0.002mm	% w/w	27	29	51	52	34	33	48	30	31	30
Textural Class **		SCL	HCL	C	C	HCL/HZCL	HCL	C	HCL	HZCL	HZCL

Notes	
Analysis Notes	The sample submitted was of adequate size to complete all analysis requested. The results as reported relate only to the item(s) submitted for testing. The results are presented on a dry matter basis unless otherwise stipulated.
Document Control	This test report shall not be reproduced, except in full, without the written approval of the laboratory.

Reported by	** Please see the attached document for the definition of textural classes. [REDACTED] Natural Resource Management, a trading division of Cawood Scientific Ltd. Coopers Bridge, Braziers Lane, Bracknell, Berkshire, RG42 6NS Tel: 01344 886338 Fax: 01344 890972 email: enquiries@nrm.uk.com
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ANALYTICAL REPORT

Report Number	79920-21	H448	WARDELL ARMSTRONG LLP
Date Received	10-DEC-2021		CITY QUADRANT
Date Reported	20-DEC-2021		11 WATERLOO SQUARE
Project	GM12014GMEM		NEWCASTLE UPON TYNE
Reference	KIRST ELLIOTT		NE1 4DP
Order Number	NT54484		

Laboratory Reference		SOIL538515	SOIL538516	SOIL538517							
Sample Reference		153 L S/S 85-100	154 T/S AUGER	158 T/S H1 10-20							
Determinand	Unit	SOIL	SOIL	SOIL							
Sand 2.00-0.063mm	% w/w	26	46	23							
Silt 0.063-0.002mm	% w/w	25	31	40							
Clay <0.002mm	% w/w	49	23	37							
Textural Class **		C	MCL	C							

Notes	
Analysis Notes	The sample submitted was of adequate size to complete all analysis requested. The results as reported relate only to the item(s) submitted for testing. The results are presented on a dry matter basis unless otherwise stipulated.
Document Control	This test report shall not be reproduced, except in full, without the written approval of the laboratory.

Reported by	** Please see the attached document for the definition of textural classes. [REDACTED] Natural Resource Management, a trading division of Cawood Scientific Ltd. Coopers Bridge, Braziers Lane, Bracknell, Berkshire, RG42 6NS Tel: 01344 886338 Fax: 01344 890972 email: enquiries@nrm.uk.com
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ADAS (UK) Textural Class Abbreviations

The texture classes are denoted by the following abbreviations:

Class	Code
Sand	S
Loamy sand	LS
Sandy loam	SL
Sandy Silt loam	SZL
Silt loam	ZL
Sandy clay loam	SCL
Clay loam	CL
Silt clay loam	ZCL
Clay	C
Silty clay	ZC
Sandy clay	SC

For the *sand*, *loamy sand*, *sandy loam* and *sandy silt loam* classes the predominant size of sand fraction may be indicated by the use of prefixes, thus:

vf	Very Fine (more than 2/3's of sand less than 0.106 mm)
f	Fine (more than 2/3's of sand less than 0.212 mm)
c	Coarse (more than 1/3 of sand greater than 0.6 mm)
m	Medium (less than 2/3's fine sand and less than 1/3 coarse sand).

The subdivisions of *clay loam* and *silty clay loam* classes according to clay content are indicated as follows:

M	medium (less than 27% clay)
H	heavy (27-35% clay)

Organic soils i.e. those with an organic matter greater than 10% will be preceded with a letter O.

Peaty soils i.e. those with an organic matter greater than 20% will be preceded with a letter P.

Appendix 3: Droughtiness Calculations

APPENDIX 3: DROUGHTINESS CALCULATIONS

Abbreviations:

TAv – Total amount of soil water available to plants, considered to be the volumetric soil water content between 0.05 and 15 bar suction or, in case of sands and loamy sands, 0.10 and 15 bar suction. These suctions approximate to the conditions of field capacity and wilting point (when the plants can extract no more moisture from the soil).

EAv – Easily available water, held in the soil between 0.05 and 2.0 bar suction, used for calculating cereal available water below 50 cm depth where root systems are less well developed, and the plant's ability to extract water is diminished.

Values of TAv and EAv are estimated for each horizon based on soil texture and structural condition according to the ALC guidelines (MAFF, 1988).

AP – crop adjusted available water capacity, a measure of the quantity of water held in the soil profile which can be taken up by a specific crop.

MD – the moisture deficit term used in the ALC droughtiness assessment is a crop-related meteorological variable which represents the balance between rainfall and potential evapotranspiration calculated over a critical portion of the growing season.

MB – moisture balance: $MB = AP - MD$, MB for wheat and potatoes determines limitation by droughtiness

Data inputs										Droughtiness calculations																							
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat										AP wheat	AP (wheat) -MD(wheat)	AP potatoes										AP (potato) -MD(potato)	Limited to ALC grade
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	Start depth	End depth			Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes						
1	1	30	MCL	0	GOOD	18				TAv	0	30	30	18	100	0	0	540	166	48	0	30	30	18	100	0	0	540	102	-12	3a		
									EAv	0	30	0	0	100	0	0	0																
	2	41	MCL	0	POOR	12	7			TAv	30	71	20	12	100	0	0	240			30	71	40	12	100	0	0	480					
										EAv	30	71	21	7	100	0	0	147															
	3	49	C	0	GOOD	21	15			TAv	71	120	0	21	100	0	0	0			71	120	0	21	100	0	0	0					
										EAv	71	120	49	15	100	0	0	735															
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0					
2	1	33	MCL	0	GOOD	18				TAv	0	33	33	18	100	0	0	594	166	48	0	33	33	18	100	0	0	594	104	-10	3a		
										EAv	0	33	0	0	100	0	0	0															
	2	40	MCL	0	POOR	12	7			TAv	33	73	17	12	100	0	0	204			33	73	37	12	100	0	0	444					
										EAv	33	73	23	7	100	0	0	161															
	3	47	C	0	GOOD	21	15			TAv	73	120	0	21	100	0	0	0			73	120	0	21	100	0	0	0					
										EAv	73	120	47	15	100	0	0	705															
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0					
3	1	22	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	170	52	120	120	0	0	100	0	0	0	106	-8	2		
										TAv	120	120	0	0	100	0	0	0															
	2	38	MCL	0	POOR	12	7			TAv	0	22	22	18	100	0	0	396			0	22	22	18	100	0	0	396					
										EAv	0	22	0	0	100	0	0	0															
	3	60	C	0	GOOD	21	15			TAv	22	60	28	12	100	0	0	336			22	60	38	12	100	0	0	456					
										EAv	22	60	10	7	100	0	0	70															
	4									TAv	60	120	0	21	100	0	0	0			60	120	10	21	100	0	0	210					
4	1	30	HCL	0	GOOD	18				EAv	60	120	60	15	100	0	0	900	199	80	120	120	0	0	100	0	0	0	136	22	1		
										TAv	120	120	0	0	100	0	0	0															
	2	5	C	0	MODERATE	16	8			EAv	120	120	0	0	100	0	0	0			30	35	5	16	100	0	0	80					
											TAv	30	35	0	8	100	0	0			0												
	3	85	C	0	GOOD	21	15			EAv	35	120	15	21	100	0	0	315			35	120	35	21	100	0	0	735					
											TAv	35	120	70	15	100	0	0			1050												
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0					
5	1	40	MCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	139	20	120	120	0	0	100	0	0	0	110	-4	2		
										TAv	120	120	0	0	100	0	0	0															
	2	25	MCL	0	POOR	12	7			EAv	40	65	15	7	100	0	0	105			40	65	25	12	100	0	0	300					
											TAv	40	65	10	12	100	0	0			120												
	3	55	C	0	MODERATE	16	8			EAv	65	120	0	16	100	0	0	0			65	120	5	16	100	0	0	80					
											TAv	65	120	55	8	100	0	0			440												
	4									EAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0					
6	1	25	HCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	124	6	120	120	0	0	100	0	0	0	100	-14	3a		
										EAv	120	120	0	0	100	0	0	0															
	2	40	HCL	0	POOR	12	7			TAv	0	40	40	18	100	0	0	720			0	40	40	18	100	0	0	720					
										EAv	0	40	0	0	100	0	0	0															
	3	55	C	0	POOR	13	7			TAv	40	65	10	12	100	0	0	120			40	65	25	12	100	0	0	300					
										EAv	40	65	15	7	100	0	0	105															
	4									TAv	65	120	0	16	100	0	0	0			65	120	5	16	100	0	0	80					
7	1	34	HCL	0	GOOD	18				EAv	65	120	55	7	100	0	0	385	129	11	120	120	0	0	100	0	0	0	104	-9	2		
										TAv	120	120	0	0	100	0	0	0															
	2	38	HCL	0	POOR	12	7			EAv	120	120	0	0	100	0	0	0			34	72	36	12	100	0	0	432					
											TAv	34	72	22	7	100	0	0			154												
	3	48	C	0	POOR	13	7			EAv	72	120	0	13	100	0	0	0			72	120	0	13	100	0	0	0					
											TAv	72	120	48	7	100	0	0			336												
	4									EAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0					

Data inputs										Droughtiness calculations																					
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)	Limited to ALC grade		
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
8	1	32	HCL	0	GOOD	18				TAv	0	32	32	18	100	0	0	576	128	10	0	32	32	18	100	0	0	576	103	-11	3a
									EAv	0	32	0	0	100	0	0	0														
	2	41	HCL	0	POOR	12	7			TAv	32	73	18	12	100	0	0	216			32	73	38	12	100	0	0	456			
									EAv	32	73	23	7	100	0	0	161														
	3	47	C	0	POOR	13	7			TAv	73	120	0	13	100	0	0	0			73	120	0	13	100	0	0	0			
									EAv	73	120	47	7	100	0	0	329														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
9	1	23	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	155	37	0	23	23	18	100	0	0	414	116	2	2
									TAv	0	23	23	18	100	0	0	414														
	2	39	HCL	0	MODERATE	16	10			EAv	0	23	0	0	100	0	0	0			23	62	39	16	100	0	0	624			
									TAv	23	62	27	16	100	0	0	432														
	3	58	SCL	0	MODERATE	15	10			EAv	23	62	12	10	100	0	0	120			62	120	8	15	100	0	0	120			
									EAv	62	120	58	10	100	0	0	580														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
10	1	26	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	125	7	0	26	26	18	100	0	0	468	100	-14	3a
									TAv	0	26	0	0	100	0	0	0														
	2	37	HCL	0	POOR	12	7			EAv	26	63	24	12	100	0	0	288			26	63	37	12	100	0	0	444			
									EAv	26	63	13	7	100	0	0	91														
	3	57	C	0	POOR	13	7			TAv	63	120	0	13	100	0	0	0			63	120	7	13	100	0	0	91			
									EAv	63	120	57	7	100	0	0	399														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
11	1	40	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	133	15	0	40	40	18	100	0	0	720	108	-6	2
									TAv	0	40	0	0	100	0	0	0														
	2	42	HCL	0	POOR	12	7			EAv	40	82	10	12	100	0	0	120			40	82	30	12	100	0	0	360			
									TAv	40	82	32	7	100	0	0	224														
	3	38	C	0	POOR	13	7			EAv	82	120	0	13	100	0	0	0			82	120	0	13	100	0	0	0			
									TAv	82	120	38	7	100	0	0	266														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
12	1	41	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	134	16	0	41	41	18	100	0	0	738	109	-5	2
									TAv	0	41	0	0	100	0	0	0														
	2	44	HCL	0	POOR	12	7			EAv	41	85	9	12	100	0	0	108			41	85	29	12	100	0	0	348			
									TAv	41	85	35	7	100	0	0	245														
	3	35	C	0	POOR	13	7			EAv	85	120	0	13	100	0	0	0			85	120	0	13	100	0	0	0			
									TAv	85	120	35	7	100	0	0	245														
	4									EAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
14	1	35	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	137	19	0	35	35	18	100	0	0	630	119	5	2
									TAv	0	35	35	18	100	0	0	0														
	2	25	MCL	0	MODERATE	16	10			EAv	0	35	0	0	100	0	0	0			35	60	25	16	100	0	0	400			
									TAv	35	60	10	10	100	0	0	100														
	3	40	HCL	0	MODERATE	16	10			EAv	60	100	0	16	100	0	0	0			60	100	10	16	100	0	0	160			
									TAv	60	100	40	10	100	0	0	400														
	4									EAv	100	100	0	0	100	0	0	0			100	100	0	0	100	0	0	0			
15	1	35	HCL	0	GOOD	18				EAv	100	100	0	0	100	0	0	0	130	12	0	35	35	18	100	0	0	630	105	-9	2
									TAv	0	35	0	0	100	0	0	0														
	2	36	HCL	0	POOR	12	7			EAv	35	71	15	12	100	0	0	180			35	71	35	12	100	0	0	420			
									TAv	35	71	21	7	100	0	0	147														
	3	49	C	0	POOR	13	7			EAv	71	120	0	13	100	0	0	0			71	120	0	13	100	0	0	0			
									TAv	71	120	49	7	100	0	0	343														
	4									EAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			

Data inputs										Droughtiness calculations															Limited to ALC grade						
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat							AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)				
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones			Stones %	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %		AP potatoes			
16	1	26	HCL	0	GOOD	18				TAv	0	26	26	18	100	0	0	468	142	24	0	26	26	18	100	0	0	468	117	3	2
									EAv	0	26	0	0	100	0	0	0														
	2	49	HCL	0	MODERATE	16	10			TAv	26	75	24	16	100	0	0	384			26	75	44	16	100	0	0	704			
									EAv	26	75	25	10	100	0	0	250														
	3	45	C	0	POOR	13	7			TAv	75	120	0	13	100	0	0	0			75	120	0	13	100	0	0	0			
									EAv	75	120	45	7	100	0	0	315														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
17	1	28	HCL	5	GOOD	18		1.0	0.5	EAv	120	120	0	0	100	0	0	0	144	25	0	28	28	18	95	1	5	480	104	-10	3a
									TAv	0	28	28	18	95	1	5	480														
	2	25	HCL	0	POOR	12	7			EAv	0	28	0	0	95	1	5	0			28	53	25	12	100	0	0	300			
									TAv	28	53	22	12	100	0	0	264														
	3	67	SCL	0	MODERATE	15	10			EAv	28	53	3	7	100	0	0	21			53	120	17	15	100	0	0	255			
									TAv	53	120	0	15	100	0	0	0														
	4								EAv	53	120	67	10	100	0	0	670														
18	1	40	C	0	GOOD	17				TAv	120	120	0	0	100	0	0	0	129	11	0	40	40	17	100	0	0	680	104	-10	2
									EAv	120	120	0	0	100	0	0	0														
	2	41	HCL	0	POOR	12	7			TAv	0	40	0	0	100	0	0	0			40	81	30	12	100	0	0	360			
									EAv	0	40	0	0	100	0	0	0														
	3	39	C	0	POOR	13	7			TAv	40	81	10	12	100	0	0	120			40	81	30	12	100	0	0	360			
									EAv	40	81	31	7	100	0	0	217														
	4								TAv	81	120	0	13	100	0	0	0	81			120	0	13	100	0	0	0				
19	1	33	HCL	0	GOOD	18				EAv	81	120	39	7	100	0	0	273	143	25	0	33	33	18	100	0	0	594	122	8	2
									TAv	120	120	0	0	100	0	0	0														
	2	36	HZCL	0	MODERATE	17	10			EAv	120	120	0	0	100	0	0	0			33	69	36	17	100	0	0	612			
									TAv	33	69	17	17	100	0	0	289														
	3	51	HCL	0	POOR	12	7			EAv	33	69	19	10	100	0	0	190			69	120	1	12	100	0	0	12			
									TAv	69	120	51	7	100	0	0	357														
	4								EAv	69	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
20	1	30	MCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	139	20	0	30	30	18	100	0	0	540	116	2	2
									EAv	120	120	0	0	100	0	0	0														
	2	25	HZCL	0	MODERATE	17	10			TAv	0	30	30	18	100	0	0	540			0	30	30	18	100	0	0	540			
									EAv	0	30	0	0	100	0	0	0														
	3	65	C	0	POOR	13	7			TAv	30	55	20	17	100	0	0	340			30	55	25	17	100	0	0	425			
									EAv	30	55	5	10	100	0	0	50														
	4								TAv	55	120	0	13	100	0	0	0	55			120	15	13	100	0	0	195				
21	1	27	HCL	0	GOOD	18				EAv	55	120	65	7	100	0	0	455	137	19	0	27	27	18	100	0	0	486	114	0	2
									TAv	120	120	0	0	100	0	0	0														
	2	23	HZCL	0	MODERATE	17	10			EAv	120	120	0	0	100	0	0	0			27	50	23	17	100	0	0	391			
									TAv	27	50	0	10	100	0	0	0														
	3	70	C	0	POOR	13	7			EAv	27	50	0	10	100	0	0	0			50	120	20	13	100	0	0	260			
									TAv	50	120	70	7	100	0	0	490														
	4								EAv	50	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
22	1	25	HCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	135	17	0	25	25	18	100	0	0	450	112	-2	2
									EAv	120	120	0	0	100	0	0	0														
	2	27	HCL	0	MODERATE	16	10			TAv	0	25	25	16	100	0	0	400			25	52	27	16	100	0	0	432			
									EAv	0	25	0	0	100	0	0	0														
	3	68	C	0	POOR	13	7			TAv	25	52	2	10	100	0	0	20			52	120	18	13	100	0	0	234			
									EAv	25	52	68	7	100	0	0	476														
	4								TAv	52	120	0	13	100	0	0	0	120			120	0	0	100	0	0	0				

Data inputs										Droughtiness calculations																					
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)	Limited to ALC grade		
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
23	1	35	HCL	0	GOOD	18				TAv	0	35	35	18	100	0	0	630	130	12	0	35	35	18	100	0	0	630	105	-9	2
									EAv	0	35	0	0	100	0	0	0														
	2	35	HCL	0	POOR	12	7			TAv	35	70	15	12	100	0	0	180			35	70	35	12	100	0	0	420			
									EAv	35	70	20	7	100	0	0	140														
	3	50	C	0	POOR	13	7			TAv	70	120	0	13	100	0	0	0			70	120	0	13	100	0	0	0			
									EAv	70	120	50	7	100	0	0	350														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
24	1	33	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	129	11	120	120	0	0	100	0	0	0	104	-10	3a
									TAv	0	33	33	18	100	0	0	594	0			33	33	18	100	0	0	594				
	2	37	HCL	0	POOR	12	7			EAv	0	33	0	0	100	0	0	0			33	70	37	12	100	0	0	444			
									TAv	33	70	17	12	100	0	0	204														
	3	50	C	0	POOR	13	7			EAv	33	70	20	7	100	0	0	140			70	120	0	13	100	0	0	0			
									EAv	70	120	50	7	100	0	0	350														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
25	1	29	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	131	13	120	120	0	0	100	0	0	0	116	2	2
									TAv	0	29	29	18	100	0	0	522	0			29	29	18	100	0	0	522				
	2	23	HCL	0	MODERATE	16	10			EAv	0	29	0	0	100	0	0	0			29	52	23	16	100	0	0	368			
									EAv	29	52	2	10	100	0	0	20														
	3	43	SCL	0	MODERATE	15	10			TAv	52	95	0	15	100	0	0	0			52	95	18	15	100	0	0	270			
									EAv	52	95	43	10	100	0	0	430														
	4									TAv	95	95	0	0	100	0	0	0			95	95	0	0	100	0	0	0			
26	1	36	HCL	0	GOOD	18				EAv	95	95	0	0	100	0	0	0	131	13	95	95	0	0	100	0	0	0	106	-8	2
									TAv	95	95	0	0	100	0	0	0														
	2	33	HCL	0	POOR	12	7			EAv	95	95	0	0	100	0	0	0			36	69	33	12	100	0	0	396			
									TAv	36	69	19	7	100	0	0	133														
	3	51	C	0	POOR	13	7			EAv	69	120	0	13	100	0	0	0			69	120	1	13	100	0	0	13			
									EAv	69	120	51	7	100	0	0	357														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
27	1	37	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	131	13	120	120	0	0	100	0	0	0	108	-6	2
									TAv	0	37	37	18	100	0	0	666	0			37	37	18	100	0	0	666				
	2	20	HCL	0	POOR	12	7			EAv	0	37	0	0	100	0	0	0			37	57	20	12	100	0	0	240			
									EAv	37	57	7	7	100	0	0	49														
	3	63	C	0	POOR	13	7			TAv	57	120	0	13	100	0	0	0			57	120	13	13	100	0	0	169			
									EAv	57	120	63	7	100	0	0	441														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
28	1	27	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	134	16	120	120	0	0	100	0	0	0	111	-3	2
									TAv	0	27	27	18	100	0	0	486	0			27	27	18	100	0	0	486				
	2	22	HCL	0	MODERATE	16	10			EAv	0	27	0	0	100	0	0	0			27	49	22	16	100	0	0	352			
									EAv	27	49	0	10	100	0	0	0														
	3	71	C	0	POOR	13	7			TAv	49	120	1	13	100	0	0	13			49	120	21	13	100	0	0	273			
									EAv	49	120	70	7	100	0	0	490														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
29	1	26	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	135	16	120	120	0	0	100	0	0	0	112	-2	2
									TAv	0	26	26	18	100	0	0	468	0			26	26	18	100	0	0	468				
	2	25	HCL	0	MODERATE	16	10			EAv	0	26	0	0	100	0	0	0			26	51	25	16	100	0	0	400			
									EAv	26	51	1	10	100	0	0	10														
	3	69	C	0	POOR	13	7			TAv	51	120	0	13	100	0	0	0			51	120	19	13	100	0	0	247			
									EAv	51	120	69	7	100	0	0	483														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			

Data inputs										Droughtiness calculations																					
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)	Limited to ALC grade		
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
30	1	40	MCL	0	GOOD	18				TAv	0	40	40	18	100	0	0	720	149	31	0	40	40	18	100	0	0	720	126	12	1
									EAv	0	40	0	0	100	0	0	0														
	2	20	MCL	0	GOOD	21	14			TAv	40	60	10	21	100	0	0	210			40	60	20	21	100	0	0	420			
									EAv	40	60	10	14	100	0	0	140														
	3	60	HCL	0	POOR	12	7			TAv	60	120	0	12	100	0	0	0			60	120	10	12	100	0	0	120			
									EAv	60	120	60	7	100	0	0	420														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
31	1	39	MCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	146	28	0	39	39	18	100	0	0	702	106	-8	2
									TAv	0	39	39	18	100	0	0	0														
	2	32	HCL	5	POOR	12	7	3.0	2.0	EAv	0	39	0	0	100	0	0	0			39	71	31	12	95	3	5	358			
									TAv	39	71	11	12	95	3	5	127														
	3	49	HCL	0	MODERATE	16	10			EAv	39	71	21	7	95	2	5	142			71	120	0	16	100	0	0	0			
									EAv	71	120	49	10	100	0	0	490														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
32	1	36	MCL	10	GOOD	18		3.0	2.0	EAv	120	120	0	0	100	0	0	0	135	17	0	36	36	18	90	3	10	594	96	-18	3a
									TAv	0	36	36	18	90	3	10	594														
	2	38	HCL	15	POOR	12	7	3.0	2.0	EAv	0	36	0	0	90	2	10	0			36	74	34	12	85	3	15	362			
									TAv	36	74	24	7	85	2	15	150														
	3	46	HCL	0	MODERATE	16	10			EAv	74	120	0	16	100	0	0	0			74	120	0	16	100	0	0	0			
									TAv	74	120	46	10	100	0	0	460														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
33	1	37	MCL	10	GOOD	18		3.0	2.0	EAv	120	120	0	0	100	0	0	0	137	19	0	37	37	18	90	3	10	611	98	-16	3a
									TAv	0	37	0	0	90	2	10	0														
	2	38	HCL	10	POOR	12	7	3.0	2.0	EAv	0	37	0	0	90	2	10	0			37	75	33	12	90	3	10	366			
									TAv	37	75	25	7	90	2	10	163														
	3	45	HCL	0	MODERATE	16	10			EAv	75	120	0	16	100	0	0	0			75	120	0	16	100	0	0	0			
									TAv	75	120	45	10	100	0	0	450														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
34	1	35	MCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	144	25	0	35	35	18	100	0	0	630	103	-10	3a
									TAv	0	35	35	18	100	0	0	0														
	2	36	MCL	5	POOR	12	7	3.0	2.0	EAv	0	35	0	0	100	0	0	0			35	71	35	12	95	3	5	404			
									TAv	35	71	21	7	95	2	5	142														
	3	49	HCL	0	MODERATE	16	10			EAv	71	120	0	16	100	0	0	0			71	120	0	16	100	0	0	0			
									TAv	71	120	49	10	100	0	0	490														
	4									EAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
35	1	32	MCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	143	25	0	32	32	18	100	0	0	576	103	-11	3a
									EAv	120	120	0	0	100	0	0	0														
	2	40	MCL	0	POOR	12	7			TAv	0	32	32	18	100	0	0	216			32	72	38	12	100	0	0	456			
									EAv	32	72	22	7	100	0	0	154														
	3	48	HCL	0	MODERATE	16	10			TAv	72	120	0	16	100	0	0	0			72	120	0	16	100	0	0	0			
									EAv	72	120	48	10	100	0	0	480														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
36	1	36	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	132	14	0	36	36	18	100	0	0	648	109	-5	2
									TAv	0	36	36	18	100	0	0	0														
	2	42	C	0	POOR	13	7			EAv	0	36	0	0	100	0	0	0			36	78	34	13	100	0	0	442			
									TAv	36	78	28	7	100	0	0	196														
	3	42	HCL	0	POOR	12	7			EAv	78	120	0	12	100	0	0	0			78	120	0	12	100	0	0	0			
									TAv	78	120	42	7	100	0	0	294														
	4									EAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			

Data inputs										Droughtiness calculations																	Limited to ALC grade				
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)			
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
37	1	35	HCL	0	GOOD	18				TAv	0	35	35	18	100	0	0	630	132	13	0	35	35	18	100	0	0	630	109	-5	2
									EAv	0	35	0	0	100	0	0	0														
	2	41	C	0	POOR	13	7			TAv	35	76	15	13	100	0	0	195			35	76	35	13	100	0	0	455			
									EAv	35	76	26	7	100	0	0	182														
	3	44	HCL	0	POOR	12	7			TAv	76	120	0	12	100	0	0	0			76	120	0	12	100	0	0	0			
									EAv	76	120	44	7	100	0	0	308														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
38	1	38	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	132	14	0	38	38	18	100	0	0	684	107	-7	2
									TAv	0	38	38	18	100	0	0	684														
	2	18	HCL	0	POOR	12	7			EAv	0	38	0	0	100	0	0	0			38	56	18	12	100	0	0	216			
									TAv	38	56	12	12	100	0	0	144														
	3	64	HCL	0	POOR	12	7			EAv	38	56	6	7	100	0	0	42			56	120	14	12	100	0	0	168			
									TAv	56	120	0	12	100	0	0	0														
	4								EAv	56	120	64	7	100	0	0	448	120			120	0	0	100	0	0	0				
39	1	35	HCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	130	12	0	35	35	18	100	0	0	630	105	-9	2
									EAv	120	120	0	0	100	0	0	0														
	2	20	HCL	0	POOR	12	7			TAv	0	35	35	18	100	0	0	630			0	35	35	18	100	0	0	630			
									EAv	0	35	0	0	100	0	0	0														
	3	65	HCL	0	POOR	12	7			TAv	35	55	15	12	100	0	0	180			35	55	20	12	100	0	0	240			
									EAv	35	55	5	7	100	0	0	35														
	4								TAv	55	120	0	12	100	0	0	0	55			120	15	12	100	0	0	180				
40	1	22	HCL	0	GOOD	18				EAv	55	120	65	7	100	0	0	455	125	7	120	120	0	0	100	0	0	0	101	-13	3a
									TAv	120	120	0	0	100	0	0	0														
	2	33	C	0	POOR	13	7			EAv	120	120	0	0	100	0	0	0			22	55	33	13	100	0	0	429			
									TAv	22	55	28	13	100	0	0	364														
	3	65	HCL	0	POOR	12	7			EAv	22	55	5	7	100	0	0	35			55	120	15	12	100	0	0	180			
									TAv	55	120	65	7	100	0	0	455														
	4								TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
41	1	23	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	126	7	120	120	0	0	100	0	0	0	101	-13	3a
									TAv	120	120	0	0	100	0	0	0														
	2	28	C	0	POOR	13	7			EAv	120	120	0	0	100	0	0	0			23	51	28	13	100	0	0	364			
									TAv	23	51	1	7	100	0	0	7														
	3	69	HCL	0	POOR	12	7			EAv	51	120	69	7	100	0	0	483			51	120	19	12	100	0	0	228			
									TAv	51	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
	4								EAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
42	1	39	HCL	5	GOOD	18		3.0	2.0	TAv	120	120	0	0	100	0	0	0	141	23	0	39	39	18	95	3	5	673	103	-11	3a
									EAv	120	120	0	0	100	0	0	0														
	2	34	C	15	POOR	13	7	3.0	2.0	TAv	0	39	39	18	95	3	5	673			0	39	39	18	95	3	5	673			
									EAv	0	39	0	0	95	2	5	0														
	3	47	HCL	0	MODERATE	16	10			TAv	39	73	11	13	85	3	15	127			39	73	31	13	85	3	15	357			
									EAv	39	73	23	7	85	2	15	144														
	4								TAv	73	120	0	16	100	0	0	0	73			120	0	16	100	0	0	0				
43	1	29	HCL	5	GOOD	18		3.0	2.0	EAv	73	120	47	10	100	0	0	470	123	5	120	120	0	0	100	0	0	0	97	-16	3a
									TAv	120	120	0	0	100	0	0	0														
	2	40	HCL	5	POOR	12	7	3.0	2.0	EAv	120	120	0	0	100	0	0	0			29	69	40	12	95	3	5	462			
									TAv	29	69	19	7	95	2	5	128														
	3	51	HCL	0	POOR	12	7			EAv	69	120	0	12	100	0	0	0			69	120	1	12	100	0	0	12			
									TAv	69	120	51	7	100	0	0	357														
	4								TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				

Data inputs										Droughtiness calculations																						
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)	Limited to ALC grade			
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes					
44	1	32	MCL	0	GOOD	18				TAv	0	32	32	18	100	0	0	576	128	10	0	32	32	18	100	0	0	576	103	-11	3a	
									EAv	0	32	0	0	100	0	0	0															
	2	13	MCL	0	POOR	12	7			TAv	32	45	13	12	100	0	0	156			32	45	13	12	100	0	0	156				
									EAv	32	45	0	7	100	0	0	0															
	3	75	HCL	0	POOR	12	7			TAv	45	120	5	12	100	0	0	60			45	120	25	12	100	0	0	300				
									EAv	45	120	70	7	100	0	0	490															
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0				
45										EAv	120	120	0	0	100	0	0	0	131	13	0	36	36	18	100	0	0	648	106	-8	2	
	1	36	MCL	0	GOOD	18				TAv	0	36	36	18	100	0	0	648			0	36	36	18	100	0	0	648				
									EAv	0	36	0	0	100	0	0	0															
	2	18	MCL	0	POOR	12	7			TAv	36	54	14	12	100	0	0	168			36	54	18	12	100	0	0	216				
									EAv	36	54	4	7	100	0	0	28															
	3	66	HCL	0	POOR	12	7			TAv	54	120	0	12	100	0	0	0			54	120	16	12	100	0	0	192				
									EAv	54	120	66	7	100	0	0	462															
46										TAv	120	120	0	0	100	0	0	0	124	6	0	28	28	18	95	3	5	483	99	-15	3a	
	1	28	MCL	5	GOOD	18		3.0	2.0	TAv	0	28	28	18	95	3	5	483			0	28	28	18	95	3	5	483				
									EAv	0	28	0	0	95	2	5	0															
	2	42	MCL	0	POOR	12	7			TAv	28	70	22	12	100	0	0	264			28	70	42	12	100	0	0	504				
									EAv	28	70	20	7	100	0	0	140															
	3	50	HCL	0	POOR	12	7			TAv	70	120	0	12	100	0	0	0			70	120	0	12	100	0	0	0				
									EAv	70	120	50	7	100	0	0	350															
47										TAv	120	120	0	0	100	0	0	0	139	21	0	25	25	18	100	0	0	450	116	2	2	
	1	25	MCL	0	GOOD	18				TAv	0	25	25	18	100	0	0	450			0	25	25	18	100	0	0	450				
									EAv	0	25	0	0	100	0	0	0															
	2	43	MCL	0	MODERATE	16	10			TAv	25	68	25	16	100	0	0	400			25	68	43	16	100	0	0	688				
									EAv	25	68	18	10	100	0	0	180															
	3	52	HCL	0	POOR	12	7			TAv	68	120	0	12	100	0	0	0			68	120	2	12	100	0	0	24				
									EAv	68	120	52	7	100	0	0	364															
48										TAv	120	120	0	0	100	0	0	0	144	26	0	45	45	18	100	0	0	810	121	7	2	
	1	45	MCL	0	GOOD	18				TAv	0	45	45	18	100	0	0	810			0	45	45	18	100	0	0	810				
									EAv	0	45	0	0	100	0	0	0															
	2	25	MCL	0	MODERATE	16	10			TAv	45	70	5	16	100	0	0	80			45	70	25	16	100	0	0	400				
									EAv	45	70	20	10	100	0	0	200															
	3	50	HCL	0	POOR	12	7			TAv	70	120	0	12	100	0	0	0			70	120	0	12	100	0	0	0				
									EAv	70	120	50	7	100	0	0	350															
49										TAv	120	120	0	0	100	0	0	0	144	26	0	120	120	0	0	100	0	0	0	118	4	2
	1	31	MCL	0	GOOD	18				TAv	0	31	31	18	100	0	0	558			0	31	31	18	100	0	0	558				
									EAv	0	31	0	0	100	0	0	0															
	2	49	MCL	0	MODERATE	16	10			TAv	31	80	19	16	100	0	0	304			31	80	39	16	100	0	0	624				
									EAv	31	80	30	10	100	0	0	300															
	3	40	HCL	0	POOR	12	7			TAv	80	120	0	12	100	0	0	0			80	120	0	12	100	0	0	0				
									EAv	80	120	40	7	100	0	0	280															
50										TAv	120	120	0	0	100	0	0	0	147	29	0	120	120	0	0	100	0	0	0	120	6	2
	1	38	MCL	0	GOOD	18				TAv	0	38	38	18	100	0	0	684			0	38	38	18	100	0	0	684				
									EAv	0	38	0	0	100	0	0	0															
	2	47	MCL	0	MODERATE	16	10			TAv	38	85	12	16	100	0	0	192			38	85	32	16	100	0	0	512				
									EAv	38	85	35	10	100	0	0	350															
	3	35	HCL	0	POOR	12	7			TAv	85	120	0	12	100	0	0	0			85	120	0	12	100	0	0	0				
									EAv	85	120	35	7	100	0	0	245															
										TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0				
	4								EAv	120	120	0	0	100	0	0	0															
									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0				
	5								TAv	120	120	0	0	100	0	0	0															
									EAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0					

Data inputs										Droughtiness calculations																			Limited to ALC grade		
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP potatoes		AP(potato) -MD(potato)	
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %					
51	1	31	HCL	0	GOOD	18				TAv	0	31	31	18	100	0	0	558	136	17	0	31	31	18	100	0	0	558	111	-3	2
									EAv	0	31	0	0	100	0	0	0														
	2	20	HCL	0	MODERATE	16	10			TAv	31	51	19	16	100	0	0	304			31	51	20	16	100	0	0	320			
									EAv	31	51	1	10	100	0	0	10														
	3	69	HCL	0	POOR	12	7			TAv	51	120	0	12	100	0	0	0			51	120	19	12	100	0	0	228			
									EAv	51	120	69	7	100	0	0	483														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
									EAv	120	120	0	0	100	0	0	0														
52	1	35	HCL	0	GOOD	18				TAv	0	35	35	18	100	0	0	630	130	12	0	35	35	18	100	0	0	630	105	-9	2
									EAv	0	35	0	0	100	0	0	0														
	2	40	HCL	0	POOR	12	7			TAv	35	75	15	12	100	0	0	180			35	75	35	12	100	0	0	420			
									EAv	35	75	25	7	100	0	0	175														
	3	45	HCL	0	POOR	12	7			TAv	75	120	0	12	100	0	0	0			75	120	0	12	100	0	0	0			
									EAv	75	120	45	7	100	0	0	315														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
									EAv	120	120	0	0	100	0	0	0														
53	1	37	HCL	0	GOOD	18				TAv	0	37	37	18	100	0	0	666	131	13	0	37	37	18	100	0	0	666	106	-8	2
									EAv	0	37	0	0	100	0	0	0														
	2	41	HCL	0	POOR	12	7			TAv	37	78	13	12	100	0	0	156			37	78	33	12	100	0	0	396			
									EAv	37	78	28	7	100	0	0	196														
	3	42	HCL	0	POOR	12	7			TAv	78	120	0	12	100	0	0	0			78	120	0	12	100	0	0	0			
									EAv	78	120	42	7	100	0	0	294														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
									EAv	120	120	0	0	100	0	0	0														
54	1	36	HCL	0	GOOD	18				TAv	0	36	36	18	100	0	0	648	131	13	0	36	36	18	100	0	0	648	106	-8	2
									EAv	0	36	0	0	100	0	0	0														
	2	23	HCL	0	POOR	12	7			TAv	36	59	14	12	100	0	0	168			36	59	23	12	100	0	0	276			
									EAv	36	59	9	7	100	0	0	63														
	3	61	HCL	0	POOR	12	7			TAv	59	120	0	12	100	0	0	0			59	120	11	12	100	0	0	132			
									EAv	59	120	61	7	100	0	0	427														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
									EAv	120	120	0	0	100	0	0	0														
55	1	28	HCL	0	GOOD	18				TAv	0	28	28	18	100	0	0	504	126	8	0	28	28	18	100	0	0	504	101	-13	3a
									EAv	0	28	0	0	100	0	0	0														
	2	47	HCL	0	POOR	12	7			TAv	28	75	22	12	100	0	0	264			28	75	42	12	100	0	0	504			
									EAv	28	75	25	7	100	0	0	175														
	3	45	HCL	0	POOR	12	7			TAv	75	120	0	12	100	0	0	0			75	120	0	12	100	0	0	0			
									EAv	75	120	45	7	100	0	0	315														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
									EAv	120	120	0	0	100	0	0	0														
56	1	38	C	5	GOOD	17		3.0	2.0	TAv	0	38	38	17	95	3	5	619	134	15	0	38	38	17	95	3	5	619	96	-18	3a
									EAv	0	38	0	0	95	2	5	0														
	2	37	HCL	15	POOR	12	7	3.0	2.0	TAv	38	75	12	12	85	3	15	128			38	75	32	12	85	3	15	341			
									EAv	38	75	25	7	85	2	15	156														
	3	45	HCL	5	MODERATE	16	10	3.0	2.0	TAv	75	120	0	16	95	3	5	0			75	120	0	16	95	3	5	0			
									EAv	75	120	45	10	95	2	5	432														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
									EAv	120	120	0	0	100	0	0	0														
57	1	39	C	5	GOOD	17		3.0	2.0	TAv	0	39	39	17	95	3	5	636	135	17	0	39	39	17	95	3	5	636	97	-17	3a
									EAv	0	39	0	0	95	2	5	0														
	2	38	HCL	15	POOR	12	7	3.0	2.0	TAv	39	77	11	12	85	3	15	117			39	77	31	12	85	3	15	330			
									EAv	39	77	27	7	85	2	15	169														
	3	43	HCL	0	MODERATE	16	10			TAv	77	120	0	16	100	0	0	0			77	120	0	16	100	0	0	0			
									EAv	77	120	43	10	100	0	0	430														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
									EAv	120	120	0	0	100	0	0	0														

Data inputs										Droughtiness calculations																	Limited to ALC grade				
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP (wheat) -MD(wheat)	AP potatoes								AP (potato) -MD(potato)			
						TAv %	% EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
58	1	37	C	10	GOOD	17		3.0	2.0	TAv	0	37	37	17	90	3	10	577	133	14	0	37	37	17	90	3	10	577	91	-22	3a
									EAv	0	37	0	0	90	2	10	0														
	2	34	HCL	20	POOR	12	7	3.0	2.0	TAv	37	71	13	12	80	3	20	133			37	71	33	12	80	3	20	337			
									EAv	37	71	21	7	80	2	20	126														
	3	49	HCL	0	MODERATE	16	10			TAv	71	120	0	16	100	0	0	0			71	120	0	16	100	0	0	0			
									EAv	71	120	49	10	100	0	0	490														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
59	1	27	MCL	0	GOOD	18				TAv	0	27	27	18	100	0	0	486	136	18	0	27	27	18	100	0	0	486	111	-3	2
									EAv	0	27	0	0	100	0	0	0														
	2	27	HCL	0	MODERATE	16	10			TAv	27	54	23	16	100	0	0	368			27	54	27	16	100	0	0	432			
									EAv	27	54	4	10	100	0	0	40														
	3	66	MCL	0	POOR	12	7			TAv	54	120	0	12	100	0	0	0			54	120	16	12	100	0	0	192			
									EAv	54	120	66	7	100	0	0	462														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
60	1	38	MCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	132	14	0	38	38	18	100	0	0	684	107	-7	2
									TAv	0	38	38	18	100	0	0	684														
	2	22	HCL	0	POOR	12	7			EAv	0	38	0	0	100	0	0	0			38	60	22	12	100	0	0	264			
									TAv	38	60	10	7	100	0	0	70														
	3	60	HCL	0	POOR	12	7			EAv	60	120	0	12	100	0	0	0			60	120	10	12	100	0	0	120			
									TAv	60	120	60	7	100	0	0	420														
	4									EAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
61	1	32	MCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	128	10	0	32	32	18	100	0	0	576	103	-11	3a
									EAv	120	120	0	0	100	0	0	0														
	2	31	HCL	0	POOR	12	7			TAv	0	32	0	0	100	0	0	0			32	63	31	12	100	0	0	372			
									EAv	32	63	13	7	100	0	0	91														
	3	57	HCL	0	POOR	12	7			TAv	63	120	0	12	100	0	0	0			63	120	7	12	100	0	0	84			
									EAv	63	120	57	7	100	0	0	399														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
62	1	25	MCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	120	2	0	25	25	18	100	0	0	450	94	-20	3a
									TAv	0	25	0	0	100	0	0	0														
	2	46	HCL	10	POOR	12	7	1.0	0.5	TAv	25	71	25	12	90	1	10	273			25	71	45	12	90	1	10	491			
									EAv	25	71	21	7	90	1	10	133														
	3	49	HCL	0	POOR	12	7			TAv	71	120	0	12	100	0	0	0			71	120	0	12	100	0	0	0			
									EAv	71	120	49	7	100	0	0	343														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
63	1	29	MCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	126	8	0	29	29	18	100	0	0	522	101	-12	3a
									TAv	0	29	0	0	100	0	0	0														
	2	66	HCL	0	POOR	12	7			EAv	0	29	0	0	100	0	0	0			29	95	41	12	100	0	0	492			
									TAv	29	95	45	7	100	0	0	315														
	3	25	HCL	0	POOR	12	7			EAv	95	120	0	12	100	0	0	0			95	120	0	12	100	0	0	0			
									TAv	95	120	25	7	100	0	0	175														
	4									EAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
64	1	34	MCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	157	39	0	29	29	18	100	0	0	522	136	22	1
									EAv	120	120	0	0	100	0	0	0														
	2	35	HCL	0	GOOD	21	14			TAv	0	34	34	18	100	0	0	612			0	34	34	18	100	0	0	612			
									EAv	0	34	0	0	100	0	0	0														
	3	51	HCL	0	POOR	12	7			TAv	34	69	16	21	100	0	0	336			34	69	35	21	100	0	0	735			
									EAv	34	69	19	14	100	0	0	266														
	4									TAv	69	120	0	12	100	0	0	0			69	120	1	12	100	0	0	12			

Data inputs										Droughtiness calculations																	Limited to ALC grade				
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)			
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
65	1	40	MCL	0	GOOD	18				TAv	0	40	40	18	100	0	0	720	143	25	0	40	40	18	100	0	0	720	120	6	2
									EAv	0	40	0	0	100	0	0	0														
	2	30	HCL	0	MODERATE	16	10			TAv	40	70	10	16	100	0	0	160			40	70	30	16	100	0	0	480			
									EAv	40	70	20	10	100	0	0	200														
	3	50	HCL	0	POOR	12	7			TAv	70	120	0	12	100	0	0	0			70	120	0	12	100	0	0	0			
									EAv	70	120	50	7	100	0	0	350														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
66	1	42	MCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	145	27	0	42	42	18	100	0	0	756	120	7	2
									TAv	0	42	42	18	100	0	0	756														
	2	33	HCL	0	MODERATE	16	10			EAv	0	42	0	0	100	0	0	0			42	75	28	16	100	0	0	448			
									TAv	42	75	8	16	100	0	0	128														
	3	45	HCL	0	POOR	12	7			EAv	42	75	25	10	100	0	0	250			75	120	0	12	100	0	0	0			
									TAv	75	120	0	12	100	0	0	0														
	4									EAv	75	120	45	7	100	0	0	315			120	120	0	0	100	0	0	0			
67	1	41	MCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	145	27	120	120	0	0	100	0	0	0	120	6	2
									EAv	120	120	0	0	100	0	0	0														
	2	34	HCL	0	MODERATE	16	10			TAv	120	120	0	0	100	0	0	0			41	75	29	16	100	0	0	464			
									EAv	41	75	25	10	100	0	0	250														
	3	45	HCL	0	POOR	12	7			TAv	75	120	0	12	100	0	0	0			75	120	0	12	100	0	0	0			
									EAv	75	120	45	7	100	0	0	315														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
68	1	33	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	137	19	120	120	0	0	100	0	0	0	114	0	2
									TAv	120	120	0	0	100	0	0	0														
	2	21	HCL	0	MODERATE	16	10			EAv	0	33	33	18	100	0	0	594			33	54	21	16	100	0	0	336			
									TAv	0	33	0	0	100	0	0	0														
	3	66	C	0	POOR	13	7			EAv	33	54	17	16	100	0	0	272			54	120	16	13	100	0	0	208			
									TAv	33	54	4	10	100	0	0	40														
	4									EAv	54	120	66	7	100	0	0	462			120	120	0	0	100	0	0	0			
69	1	32	HCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	136	18	120	120	0	0	100	0	0	0	113	-1	2
									EAv	120	120	0	0	100	0	0	0														
	2	20	HCL	0	MODERATE	16	10			TAv	120	120	0	0	100	0	0	0			32	52	20	16	100	0	0	320			
									EAv	32	52	2	10	100	0	0	20														
	3	68	C	0	POOR	13	7			TAv	52	120	0	13	100	0	0	0			52	120	18	13	100	0	0	234			
									EAv	52	120	68	7	100	0	0	476														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
70	1	30	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	136	18	120	120	0	0	100	0	0	0	113	-1	2
									TAv	120	120	0	0	100	0	0	0														
	2	23	HCL	0	MODERATE	16	10			EAv	0	30	30	18	100	0	0	540			30	53	23	16	100	0	0	368			
									TAv	0	30	0	0	100	0	0	0														
	3	67	C	0	POOR	13	7			EAv	30	53	3	10	100	0	0	30			53	120	17	13	100	0	0	221			
									TAv	53	120	0	13	100	0	0	0														
	4									EAv	53	120	67	7	100	0	0	469			120	120	0	0	100	0	0	0			
71	1	33	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	131	12	120	120	0	0	100	0	0	0	108	-6	2
									TAv	120	120	0	0	100	0	0	0														
	2	22	C	0	POOR	13	7			EAv	0	33	33	18	100	0	0	594			33	55	22	13	100	0	0	286			
									TAv	33	55	17	13	100	0	0	221														
	3	65	C	0	POOR	13	7			EAv	33	55	5	7	100	0	0	35			55	120	15	13	100	0	0	195			
									TAv	55	120	0	13	100	0	0	0														
	4									EAv	55	120	65	7	100	0	0	455			120	120	0	0	100	0	0	0			

Data inputs										Droughtiness calculations																	Limited to ALC grade				
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)			
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
72	1	35	HCL	0	GOOD	18				TAv	0	35	35	18	100	0	0	630	132	13	0	35	35	18	100	0	0	630	109	-5	2
									EAv	0	35	0	0	100	0	0	0														
	2	40	C	0	POOR	13	7			TAv	35	75	15	13	100	0	0	195			35	75	35	13	100	0	0	455			
									EAv	35	75	25	7	100	0	0	175														
	3	45	C	0	POOR	13	7			TAv	75	120	0	13	100	0	0	0			75	120	0	13	100	0	0	0			
									EAv	75	120	45	7	100	0	0	315														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
73	1	38	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	137	19	0	38	38	18	100	0	0	684	114	0	2
									TAv	0	38	38	18	100	0	0	684														
	2	13	HCL	0	MODERATE	16	10			EAv	0	38	0	0	100	0	0	0			38	51	13	16	100	0	0	208			
									TAv	38	51	12	16	100	0	0	192														
	3	69	C	0	POOR	13	7			EAv	38	51	1	10	100	0	0	10			51	120	19	13	100	0	0	247			
									TAv	51	120	0	13	100	0	0	0	EAv			51	120	69	7	100	0	0	483			
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
74	1	31	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	136	18	0	31	31	18	100	0	0	558	113	0	2
									TAv	0	31	0	0	100	0	0	0														
	2	27	C	0	MODERATE	16	8			TAv	31	58	19	16	100	0	0	304			31	58	27	16	100	0	0	432			
									EAv	31	58	8	8	100	0	0	64														
	3	62	HCL	0	POOR	12	7			TAv	58	120	0	12	100	0	0	0			58	120	12	12	100	0	0	144			
									EAv	58	120	62	7	100	0	0	434														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
75	1	30	SCL	10	GOOD	17		10.0	7.0	EAv	120	120	0	0	100	0	0	0	124	6	0	30	30	17	90	10	10	489	98	-16	3a
									TAv	0	30	30	17	90	10	10	489														
	2	30	SCL	55	MODERATE	15	10	10.0	7.0	EAv	0	30	0	0	90	7	10	0			30	60	30	15	45	10	55	368			
									TAv	30	60	20	15	45	10	55	84														
	3	60	HCL	0	POOR	12	7			EAv	30	60	10	10	45	7	55	84			60	120	10	12	100	0	0	120			
									TAv	60	120	60	7	100	0	0	420														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
76	1	38	SCL	10	GOOD	17		3.0	2.0	EAv	120	120	0	0	100	0	0	0	132	14	0	38	38	17	90	3	10	593	105	-9	2
									TAv	0	38	38	17	90	3	10	593														
	2	37	SCL	15	MODERATE	15	10	10.0	7.0	EAv	0	38	0	0	90	2	10	0			38	75	32	15	85	10	15	456			
									TAv	38	75	25	10	85	7	15	239														
	3	45	HCL	0	POOR	12	7			EAv	38	75	25	10	85	7	15	239			75	120	0	12	100	0	0	0			
									TAv	75	120	45	7	100	0	0	315														
	4									EAv	75	120	45	7	100	0	0	315			120	120	0	0	100	0	0	0			
77	1	36	MCL	5	GOOD	18		3.0	2.0	TAv	120	120	0	0	100	0	0	0	139	21	0	36	36	18	95	3	5	621	116	2	2
									EAv	120	120	0	0	100	0	0	0														
	2	33	MCL	0	MODERATE	16	10			TAv	0	36	36	18	95	3	5	621			36	69	33	16	100	0	0	528			
									EAv	0	36	0	0	95	2	5	0														
	3	51	HCL	0	POOR	12	7			TAv	36	69	19	10	100	0	0	190			69	120	1	12	100	0	0	12			
									EAv	36	69	19	10	100	0	0	190														
	4									TAv	69	120	51	7	100	0	0	357			120	120	0	0	100	0	0	0			
78	1	30	MCL	10	GOOD	18		3.0	2.0	EAv	120	120	0	0	100	0	0	0	134	16	0	30	30	18	90	3	10	495	123	9	2
									TAv	0	30	30	18	90	3	10	495														
	2	30	C	10	GOOD	21	15	3.0	2.0	EAv	0	30	0	0	90	2	10	0			30	60	30	21	90	3	10	576			
									TAv	30	60	20	21	90	3	10	384														
	3	40	C	0	MODERATE	16	8			EAv	30	60	10	15	90	2	10	137			60	100	0	16	100	0	0	0			
									TAv	60	100	0	16	100	0	0	0	EAv			60	100	40	8	100	0	0	320			
	4									TAv	100	100	0	0	100	0	0	0			100	100	0	0	100	0	0	0			

Data inputs										Droughtiness calculations																	Limited to ALC grade				
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat							AP wheat	AP(wheat) -MD(wheat)	AP potatoes									AP(potato) -MD(potato)			
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones			Stones %	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
79	1	34	MCL	0	GOOD	18				TAv	0	34	34	18	100	0	0	612	124	6	0	34	34	18	100	0	0	612	104	-9	2
									EAv	0	34	0	0	100	0	0	0														
	2	36	MCL	0	POOR	12	7			TAv	34	70	16	12	100	0	0	192			34	70	36	12	100	0	0	432			
									EAv	34	70	20	7	100	0	0	140														
	3	30	HCL	0	MODERATE	16	10			TAv	70	100	0	16	100	0	0	0			70	100	0	16	100	0	0	0			
									EAv	70	100	30	10	100	0	0	300														
	4									TAv	100	100	0	0	100	0	0	0			100	100	0	0	100	0	0	0			
80									EAv	100	100	0	0	100	0	0	0														
	1	31	MCL	0	GOOD	18				TAv	100	100	0	0	100	0	0	0	100	100	0	0	100	0	0	0					
									EAv	100	100	0	0	100	0	0	0														
	2	40	MCL	0	MODERATE	16	10			TAv	0	31	31	18	100	0	0	558	0	31	31	18	100	0	0	558					
									EAv	0	31	0	0	100	0	0	0														
	3	49	HCL	0	MODERATE	16	10			TAv	31	71	19	16	100	0	0	304	31	71	39	16	100	0	0	624					
									EAv	31	71	21	10	100	0	0	210														
81									TAv	71	120	0	16	100	0	0	0	71	120	0	16	100	0	0	0						
									EAv	71	120	49	10	100	0	0	490														
	4								TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
	5								TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
									EAv	120	120	0	0	100	0	0	0														
82	1	30	HCL	0	GOOD	18				TAv	0	30	30	18	100	0	0	540	142	24	0	30	30	18	100	0	0	540	112	-2	2
									EAv	0	30	0	0	100	0	0	0														
	2	20	MCL	0	MODERATE	16	10			TAv	30	50	20	16	100	0	0	320			30	50	20	16	100	0	0	320			
									EAv	30	50	0	10	100	0	0	0														
	3	70	SCL	0	POOR	13	8			TAv	50	120	0	13	100	0	0	0			50	120	20	13	100	0	0	260			
									EAv	50	120	70	8	100	0	0	560														
	4								TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
83									EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
	5								EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
	1	35	MCL	0	GOOD	18				TAv	0	35	35	18	100	0	0	630	146	28	0	35	35	18	100	0	0	630	119	5	2
									EAv	0	35	0	0	100	0	0	0														
2	47	MCL	0	MODERATE	16	10			TAv	35	82	15	16	100	0	0	240	35			82	35	16	100	0	0	560				
								EAv	35	82	32	10	100	0	0	320															
3	38	HCL	0	POOR	12	7			TAv	82	120	0	12	100	0	0	0	82			120	0	12	100	0	0	0				
								EAv	82	120	38	7	100	0	0	266															
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
84									EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
	5								EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
	1	37	MCL	0	GOOD	18				TAv	0	37	37	18	100	0	0	666	146	28	0	37	37	18	100	0	0	666	119	6	2
									EAv	0	37	0	0	100	0	0	0														
2	45	MCL	0	MODERATE	16	10			TAv	37	82	13	16	100	0	0	208	37			82	33	16	100	0	0	528				
								EAv	37	82	32	10	100	0	0	320															
3	38	HCL	0	POOR	12	7			TAv	82	120	0	12	100	0	0	0	82			120	0	12	100	0	0	0				
								EAv	82	120	38	7	100	0	0	266															
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
85									EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
	5								EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
	1	37	MCL	0	GOOD	18				TAv	0	37	37	18	100	0	0	666	144	26	0	37	37	18	100	0	0	666	119	6	2
									EAv	0	37	0	0	100	0	0	0														
2	38	MCL	0	MODERATE	16	10			TAv	37	75	13	16	100	0	0	208	37			75	33	16	100	0	0	528				
								EAv	37	75	25	10	100	0	0	250															
3	45	HCL	0	POOR	12	7			TAv	75	120	0	12	100	0	0	0	75			120	0	12	100	0	0	0				
								EAv	75	120	45	7	100	0	0	315															
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				

Data inputs										Droughtiness calculations																	Limited to ALC grade				
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat							AP wheat	AP(wheat) -MD(wheat)	AP potatoes									AP(potato) -MD(potato)			
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones			Stones %	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
86	1	30	MCL	0	GOOD	18				TAv	0	30	30	18	100	0	0	540	141	23	0	30	30	18	100	0	0	540	118	4	2
									EAv	0	30	0	0	100	0	0	0														
	2	39	MCL	0	MODERATE	16	10			TAv	30	69	20	16	100	0	0	320			30	69	39	16	100	0	0	624			
									EAv	30	69	19	10	100	0	0	190														
	3	51	HCL	0	POOR	12	7			TAv	69	120	0	12	100	0	0	0			69	120	1	12	100	0	0	12			
									EAv	69	120	51	7	100	0	0	357														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
87										EAv	120	120	0	0	100	0	0	0													
	1	33	HCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	0	120	120	0	0	100	0	0	0				
										EAv	120	120	0	0	100	0	0	0													
	2	22	C	0	MODERATE	16	8			TAv	0	33	33	18	100	0	0	594	0	33	33	18	100	0	0	594					
										EAv	0	33	0	0	100	0	0	0													
	3	65	C	0	POOR	13	7			TAv	33	55	17	16	100	0	0	272	33	55	22	16	100	0	0	352					
										EAv	33	55	5	8	100	0	0	40													
88										TAv	55	120	0	13	100	0	0	0	55	120	15	13	100	0	0	195					
	4									EAv	55	120	65	7	100	0	0	455													
										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
	5									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
										EAv	120	120	0	0	100	0	0	0													
89	1	30	HCL	0	GOOD	18				TAv	0	30	30	18	100	0	0	540	135	17	0	30	30	18	100	0	0	540	113	-1	2
									EAv	0	30	0	0	100	0	0	0														
	2	23	C	0	MODERATE	16	8			TAv	30	53	20	16	100	0	0	320			30	53	23	16	100	0	0	368			
									EAv	30	53	3	8	100	0	0	24														
	3	67	C	0	POOR	13	7			TAv	53	120	0	13	100	0	0	0			53	120	17	13	100	0	0	221			
									EAv	53	120	67	7	100	0	0	469														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
90										EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
	5									EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0													
										EAv	120	120	0	0	100	0	0	0													
91	1	25	C	0	GOOD	17				TAv	0	25	25	17	100	0	0	425	124	6	0	25	25	17	100	0	0	425	101	-13	3a
									EAv	0	25	0	0	100	0	0	0														
	2	32	C	0	POOR	13	7			TAv	25	57	25	13	100	0	0	325			25	57	32	13	100	0	0	416			
									EAv	25	57	7	7	100	0	0	49														
	3	63	C	0	POOR	13	7			TAv	57	120	0	13	100	0	0	0			57	120	13	13	100	0	0	169			
									EAv	57	120	63	7	100	0	0	441														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
92										EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
	5									EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0													
										EAv	120	120	0	0	100	0	0	0													

Data inputs										Droughtiness calculations																					
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)	Limited to ALC grade		
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
93	1	40	HCL	0	GOOD	18				TAv	0	40	40	18	100	0	0	720	137	19	0	40	40	18	100	0	0	720	114	0	2
									EAv	0	40	0	0	100	0	0	0														
	2	11	HCL	0	MODERATE	16	10			TAv	40	51	10	16	100	0	0	160			40	51	11	16	100	0	0	176			
									EAv	40	51	1	10	100	0	0	10														
	3	69	C	0	POOR	13	7			TAv	51	120	0	13	100	0	0	0			51	120	19	13	100	0	0	247			
									EAv	51	120	69	7	100	0	0	483														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
93.1	1	26	HCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	133	15	0	26	26	18	100	0	0	468	110	-4	2
									TAv	0	26	26	18	100	0	0	0														
	2	19	C	0	MODERATE	16	8			EAv	0	26	0	0	100	0	0	0			26	45	19	16	100	0	0	304			
									TAv	26	45	19	16	100	0	0	304														
	3	75	C	0	POOR	13	7			EAv	26	45	0	8	100	0	0	0			45	120	25	13	100	0	0	325			
									TAv	45	120	5	13	100	0	0	65														
	4									EAv	45	120	70	7	100	0	0	490			120	120	0	0	100	0	0	0			
94	1	30	HCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	136	18	120	120	0	0	100	0	0	0	114	0	2
									EAv	120	120	0	0	100	0	0	0														
	2	29	C	0	MODERATE	16	8			TAv	120	120	0	0	100	0	0	0			30	59	29	16	100	0	0	464			
									EAv	30	59	9	8	100	0	0	72														
	3	61	HCL	0	POOR	12	7			TAv	59	120	0	12	100	0	0	0			59	120	11	12	100	0	0	132			
									EAv	59	120	61	7	100	0	0	427														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
95	1	39	C	10	GOOD	17		3.0	2.0	EAv	120	120	0	0	100	0	0	0	121	3	120	120	0	0	100	0	0	0	96	-17	3a
									TAv	120	120	0	0	100	0	0	0														
	2	34	C	15	POOR	13	7	3.0	2.0	EAv	0	39	0	0	90	2	10	0			39	73	31	13	85	3	15	357			
									TAv	39	73	11	13	85	3	15	127														
	3	47	HCL	0	POOR	12	7			EAv	39	73	23	7	85	2	15	144			73	120	0	12	100	0	0	0			
									TAv	73	120	47	7	100	0	0	329														
	4									EAv	73	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
96	1	30	MCL	15	GOOD	18		3.0	2.0	TAv	120	120	0	0	100	0	0	0	117	-1	120	120	0	0	100	0	0	0	92	-22	3a
									EAv	120	120	0	0	100	0	0	0														
	2	43	MCL	10	POOR	12	7	3.0	2.0	TAv	0	30	30	18	85	3	15	473			0	30	30	18	85	3	15	473			
									EAv	0	30	0	0	85	2	15	0														
	3	47	HCL	0	POOR	12	7			TAv	30	73	20	12	90	3	10	222			30	73	40	12	90	3	10	444			
									EAv	30	73	23	7	90	2	10	150														
	4									TAv	73	120	0	12	100	0	0	0			73	120	0	12	100	0	0	0			
97	1	38	MCL	15	GOOD	18		3.0	2.0	EAv	73	120	47	7	100	0	0	329	121	3	120	120	0	0	100	0	0	0	95	-18	3a
									TAv	120	120	0	0	100	0	0	0														
	2	33	MCL	10	POOR	12	7	3.0	2.0	EAv	120	120	0	0	100	0	0	0			38	71	32	12	90	3	10	355			
									TAv	38	71	21	7	90	2	10	137														
	3	49	HCL	0	POOR	12	7			EAv	71	120	0	12	100	0	0	0			71	120	0	12	100	0	0	0			
									TAv	71	120	49	7	100	0	0	343														
	4									EAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
98	1	41	MCL	5	GOOD	18		3.0	2.0	TAv	120	120	0	0	100	0	0	0	129	11	120	120	0	0	100	0	0	0	103	-11	3a
									EAv	120	120	0	0	100	0	0	0														
	2	27	MCL	10	POOR	12	7	3.0	2.0	TAv	0	41	41	18	95	3	5	707			0	41	41	18	95	3	5	707			
									EAv	0	41	0	0	95	2	5	0														
	3	52	HCL	0	POOR	12	7			TAv	41	68	9	12	90	3	10	100			41	68	27	12	90	3	10	300			
									EAv	41	68	18	7	90	2	10	117														
	4									TAv	68	120	0	12	100	0	0	0			68	120	2	12	100	0	0	24			

Data inputs										Droughtiness calculations															Limited to ALC grade						
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)			
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thckn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thckn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
99	1	30	MCL	5	GOOD	18		3.0	2.0	TAv	0	30	30	18	95	3	5	518	125	7	0	30	30	18	95	3	5	518	100	-14	3a
									EAv	0	30	0	0	95	2	5	0														
	2	23	MCL	0	POOR	12	7			TAv	30	53	20	12	100	0	0	240			30	53	23	12	100	0	0	276			
									EAv	30	53	3	7	100	0	0	21														
	3	67	HCL	0	POOR	12	7			TAv	53	120	0	12	100	0	0	0			53	120	17	12	100	0	0	204			
									EAv	53	120	67	7	100	0	0	469														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
100										EAv	120	120	0	0	100	0	0	0													
	1	32	MCL	0	GOOD	18				TAv	0	32	32	18	100	0	0	576	128	10	0	32	32	18	100	0	0	576	103	-11	3a
									EAv	0	32	0	0	100	0	0	0														
	2	33	MCL	0	POOR	12	7			TAv	32	65	18	12	100	0	0	216			32	65	33	12	100	0	0	396			
									EAv	32	65	15	7	100	0	0	105														
	3	55	HCL	0	POOR	12	7			TAv	65	120	0	12	100	0	0	0			65	120	5	12	100	0	0	60			
									EAv	65	120	55	7	100	0	0	385														
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
101										EAv	120	120	0	0	100	0	0	0													
	1	42	C	0	GOOD	17				TAv	0	42	42	17	100	0	0	714	131	13	0	42	42	17	100	0	0	714	108	-6	2
									EAv	0	42	0	0	100	0	0	0														
	2	43	C	0	POOR	13	7			TAv	42	85	8	13	100	0	0	104			42	85	28	13	100	0	0	364			
									EAv	42	85	35	7	100	0	0	245														
	3	35	C	0	POOR	13	7			TAv	85	120	0	13	100	0	0	0			85	120	0	13	100	0	0	0			
									EAv	85	120	35	7	100	0	0	245														
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
102										EAv	120	120	0	0	100	0	0	0													
	1	26	HCL	0	GOOD	18				TAv	0	26	26	18	100	0	0	468	133	15	0	26	26	18	100	0	0	468	110	-4	2
									EAv	0	26	0	0	100	0	0	0														
	2	19	C	0	MODERATE	16	8			TAv	26	45	19	16	100	0	0	304			26	45	19	16	100	0	0	304			
									EAv	26	45	0	8	100	0	0	0														
	3	75	C	0	POOR	13	7			TAv	45	120	5	13	100	0	0	65			45	120	25	13	100	0	0	325			
									EAv	45	120	70	7	100	0	0	490														
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
103										EAv	120	120	0	0	100	0	0	0													
	1	24	HCL	0	GOOD	18				TAv	0	24	24	18	100	0	0	432	192	74	0	24	24	18	100	0	0	432	129	15	1
									EAv	0	24	0	0	100	0	0	0														
	2	22	HCL	0	MODERATE	16	10			TAv	24	46	22	16	100	0	0	352			24	46	22	16	100	0	0	352			
									EAv	24	46	0	10	100	0	0	0														
	3	74	C	0	GOOD	21	15			TAv	46	120	4	21	100	0	0	84			46	120	24	21	100	0	0	504			
									EAv	46	120	70	15	100	0	0	1050														
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
104										EAv	120	120	0	0	100	0	0	0													
	1	25	HCL	0	GOOD	18				TAv	0	25	25	18	100	0	0	450	192	73	0	25	25	18	100	0	0	450	129	15	1
									EAv	0	25	0	0	100	0	0	0														
	2	22	C	0	MODERATE	16	8			TAv	25	47	22	16	100	0	0	352			25	47	22	16	100	0	0	352			
									EAv	25	47	0	8	100	0	0	0														
	3	73	C	0	GOOD	21	15			TAv	47	120	3	21	100	0	0	63			47	120	23	21	100	0	0	483			
									EAv	47	120	70	15	100	0	0	1050														
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
105										EAv	120	120	0	0	100	0	0	0													
	1	29	HCL	0	GOOD	18				TAv	0	29	29	18	100	0	0	522	193	75	0	29	29	18	100	0	0	522	130	16	1
									EAv	0	29	0	0	100	0	0	0														
	2	16	C	0	MODERATE	16	8			TAv	29	45	16	16	100	0	0	256			29	45	16	16	100	0	0	256			
									EAv	29	45	0	8	100	0	0	0														
	3	75	C	0	GOOD	21	15			TAv	45	120	5	21	100	0	0	105			45	120	25	21	100	0	0	525			
									EAv	45	120	70	15	100	0	0	1050														
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
										EAv	120	120	0	0	100	0	0	0													
	5									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													

Data inputs										Droughtiness calculations																				Limited to ALC grade					
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP (wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)								
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thckn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %		AP wheat	Start depth	End depth	Horiz. thckn.	TAv top/sub soil	non-stone %	TAv stones	Stone %		AP potatoes							
106	1	26	HCL	0	GOOD	18				TAv	0	26	26	18	100	0	0	468	172	54	0	26	26	18	100	0	0	468	130	17	1				
									EAv	0	26	0	0	100	0	0	0					26	48	22	17	100	0	0				374			
	2	22	HZCL	0	MODERATE	17	10			TAv	26	48	22	17	100	0	0	374					48	120	22	21	100	0				0	462		
									EAv	26	48	0	10	100	0	0	0																		
	3	72	HZCL	0	GOOD	21	12			TAv	48	120	2	21	100	0	0	42					120	120	0	0	100	0				0	0		
									EAv	48	120	70	12	100	0	0	840																		
107	1	27	HCL	0	GOOD	18				TAv	0	27	27	18	100	0	0	486	193	75	0	27	27	18	100	0	0	486	130	16	1				
									EAv	0	27	0	0	100	0	0	0					27	45	18	16	100	0	0				288			
	2	18	C	0	MODERATE	16	8			TAv	27	45	18	16	100	0	0	288					45	120	25	21	100	0				0	525		
									EAv	27	45	0	8	100	0	0	0																		
	3	75	C	0	GOOD	21	15			TAv	45	120	5	21	100	0	0	105					120	120	0	0	100	0				0	0		
									EAv	45	120	70	15	100	0	0	1050																		
108	1	29	HCL	5	GOOD	18		1.0	0.5	TAv	0	29	29	18	95	1	5	497	172	53	0	29	29	18	95	1	5	497	115	1	2				
									EAv	0	29	0	0	95	1	5	0					29	55	26	13	100	0	0				338			
	2	26	C	0	POOR	13	7			TAv	29	55	21	13	100	0	0	273					55	120	15	21	100	0				0	315		
									EAv	29	55	5	7	100	0	0	35																		
	3	65	MCL	0	GOOD	21	14			TAv	55	120	0	21	100	0	0	0					120	120	0	0	100	0				0	0		
									EAv	55	120	65	14	100	0	0	910																		
109	1	32	HCL	0	GOOD	18				TAv	0	32	32	18	100	0	0	576	130	12	0	32	32	18	100	0	0	576	107	-7	2				
									EAv	0	32	0	0	100	0	0	0					32	54	22	13	100	0	0				286			
	2	22	C	0	POOR	13	7			TAv	32	54	18	13	100	0	0	234					54	120	16	13	100	0				0	208		
									EAv	32	54	4	7	100	0	0	28																		
	3	66	C	0	POOR	13	7			TAv	54	120	0	13	100	0	0	0					120	120	0	0	100	0				0	0		
									EAv	54	120	66	7	100	0	0	462																		
110	1	28	C	0	GOOD	17				TAv	0	28	28	17	100	0	0	476	132	14	0	28	28	17	100	0	0	476	109	-4	2				
									EAv	0	28	0	0	100	0	0	0					28	52	24	16	100	0	0				384			
	2	24	C	0	MODERATE	16	8			TAv	28	52	22	16	100	0	0	352					52	120	18	13	100	0				0	234		
									EAv	28	52	2	8	100	0	0	16																		
	3	68	C	0	POOR	13	7			TAv	52	120	0	13	100	0	0	0					120	120	0	0	100	0				0	0		
									EAv	52	120	68	7	100	0	0	476																		
111	1	24	C	10	GOOD	17		1.0	0.5	TAv	0	24	24	17	90	1	10	370	120	2	0	24	24	17	90	1	10	370	97	-17	3a				
									EAv	0	24	0	0	90	1	10	0					24	53	29	13	100	0	0				377			
	2	29	C	0	POOR	13	7			TAv	24	53	26	13	100	0	0	338					53	120	17	13	100	0				0	221		
									EAv	24	53	3	7	100	0	0	21																		
	3	67	C	0	POOR	13	7			TAv	53	120	0	13	100	0	0	0					120	120	0	0	100	0				0	0		
									EAv	53	120	67	7	100	0	0	469																		
112	1	26	C	0	GOOD	17				TAv	0	26	26	17	100	0	0	442	124	6	0	26	26	17	100	0	0	442	101	-12	3a				
									EAv	0	26	0	0	100	0	0	0					26	52	26	13	100	0	0				338			
	2	26	C	0	POOR	13	7			TAv	26	52	24	13	100	0	0	312					52	120	18	13	100	0				0	234		
									EAv	26	52	2	7	100	0	0	14																		
	3	68	C	0	POOR	13	7			TAv	52	120	0	13	100	0	0	0					120	120	0	0	100	0				0	0		
									EAv	52	120	68	7	100	0	0	476																		

Data inputs										Droughtiness calculations																	Limited to ALC grade				
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)			
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thckn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thckn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
113	1	36	HCL	0	GOOD	18				TAv	0	36	36	18	100	0	0	648	137	19	0	36	36	18	100	0	0	648	114	0	2
									EAv	0	36	0	0	100	0	0	0														
	2	16	HCL	0	MODERATE	16	10			TAv	36	52	14	16	100	0	0	224			36	52	16	16	100	0	0	256			
									EAv	36	52	2	10	100	0	0	20														
	3	68	C	0	POOR	13	7			TAv	52	120	0	13	100	0	0	0			52	120	18	13	100	0	0	234			
									EAv	52	120	68	7	100	0	0	476														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
114	1	35	MCL	5	GOOD	18		3.0	2.0	EAv	120	120	0	0	100	0	0	0	144	26	0	35	35	18	95	3	5	604	116	3	2
									TAv	0	35	35	18	95	3	5	604														
	2	50	MCL	0	MODERATE	16	10			EAv	0	35	0	0	95	2	5	0			35	85	35	16	100	0	0	560			
									TAv	35	85	15	16	100	0	0	240														
	3	35	HCL	0	POOR	12	7			EAv	35	85	35	10	100	0	0	350			85	120	0	12	100	0	0	0			
									TAv	85	120	0	12	100	0	0	0														
	4								EAv	85	120	35	7	100	0	0	245	120			120	0	0	100	0	0	0				
115	1	32	MCL	5	GOOD	18		3.0	2.0	TAv	120	120	0	0	100	0	0	0	141	22	0	32	32	18	95	3	5	552	116	2	2
									EAv	120	120	0	0	100	0	0	0														
	2	43	MCL	0	MODERATE	16	10			TAv	0	32	32	18	95	3	5	552			32	75	38	16	100	0	0	608			
									EAv	0	32	0	0	95	2	5	0														
	3	45	HCL	0	POOR	12	7			TAv	32	75	25	10	100	0	0	250			75	120	0	12	100	0	0	0			
									EAv	75	120	0	12	100	0	0	0														
	4								TAv	75	120	45	7	100	0	0	315	120			120	0	0	100	0	0	0				
116	1	34	MCL	5	GOOD	18		3.0	2.0	EAv	120	120	0	0	100	0	0	0	137	19	0	34	34	18	95	3	5	587	113	-1	2
									TAv	0	34	34	18	95	3	5	587														
	2	28	MCL	0	MODERATE	16	10			EAv	0	34	0	0	95	2	5	0			34	62	28	16	100	0	0	448			
									TAv	34	62	16	16	100	0	0	256														
	3	58	HCL	0	POOR	12	7			EAv	34	62	12	10	100	0	0	120			62	120	8	12	100	0	0	96			
									TAv	62	120	58	7	100	0	0	406														
	4								EAv	62	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
117	1	33	MCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	141	23	0	33	33	18	100	0	0	594	118	4	2
									EAv	120	120	0	0	100	0	0	0														
	2	35	MCL	0	MODERATE	16	10			TAv	0	33	33	18	100	0	0	594			33	68	35	16	100	0	0	560			
									EAv	0	33	0	0	100	0	0	0														
	3	52	HCL	0	POOR	12	7			TAv	33	68	18	10	100	0	0	180			68	120	2	12	100	0	0	24			
									EAv	68	120	52	7	100	0	0	364														
	4								TAv	68	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
118	1	41	C	0	GOOD	17				EAv	120	120	0	0	100	0	0	0	130	12	0	41	41	17	100	0	0	697	107	-6	2
									TAv	0	41	41	17	100	0	0	697														
	2	40	C	0	POOR	13	7			EAv	0	41	0	0	100	0	0	0			41	81	29	13	100	0	0	377			
									TAv	41	81	9	13	100	0	0	117														
	3	39	C	0	POOR	13	7			EAv	41	81	31	7	100	0	0	217			81	120	0	13	100	0	0	0			
									TAv	81	120	0	13	100	0	0	0														
	4								EAv	81	120	39	7	100	0	0	273	120			120	0	0	100	0	0	0				
119	1	41	C	0	GOOD	17				EAv	120	120	0	0	100	0	0	0	130	12	0	41	41	17	100	0	0	697	107	-6	2
									TAv	120	120	0	0	100	0	0	0														
	2	43	C	0	POOR	13	7			EAv	120	120	0	0	100	0	0	0			41	84	29	13	100	0	0	377			
									TAv	41	84	34	7	100	0	0	238														
	3	36	C	0	POOR	13	7			EAv	84	120	0	13	100	0	0	0			84	120	0	13	100	0	0	0			
									TAv	84	120	36	7	100	0	0	252														
	4								EAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				

Data inputs										Droughtiness calculations																					
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP (wheat) -MD(wheat)	AP potatoes								Limited to ALC grade				
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %		AP wheat	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %		AP potatoes	AP(potato) -MD(potato)		
120	1	44	C	0	GOOD	17				TAv	0	44	44	17	100	0	0	748	132	14	0	44	44	17	100	0	0	748	109	-5	2
									EAv	0	44	0	0	100	0	0	0														
	2	39	C	0	POOR	13	7			TAv	44	83	6	13	100	0	0	78			44	83	26	13	100	0	0	338			
									EAv	44	83	33	7	100	0	0	231														
	3	37	C	0	POOR	13	7			TAv	83	120	0	13	100	0	0	0			83	120	0	13	100	0	0	0			
									EAv	83	120	37	7	100	0	0	259	120			120	0	0	100	0	0	0				
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
121	1	43	C	0	GOOD	17				EAv	120	120	0	0	100	0	0	0	131	13	0	43	43	17	100	0	0	731	108	-6	2
									TAv	0	43	43	17	100	0	0	731														
	2	37	C	0	POOR	13	7			EAv	0	43	0	0	100	0	0	0			43	80	27	13	100	0	0	351			
									TAv	43	80	7	13	100	0	0	91														
	3	40	C	0	POOR	13	7			EAv	43	80	30	7	100	0	0	210			80	120	0	13	100	0	0	0			
									TAv	80	120	0	13	100	0	0	0														
	4								EAv	80	120	40	7	100	0	0	280	120			120	0	0	100	0	0	0				
121									TAv	120	120	0	0	100	0	0	0	131	13	120	120	0	0	100	0	0	0	108	-6	2	
									EAv	120	120	0	0	100	0	0	0														
	5								TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0				
									EAv	120	120	0	0	100	0	0	0														
	1	43	C	0	GOOD	17				TAv	0	43	43	17	100	0	0			731	0	43	43	17	100	0	0				731
									EAv	0	43	0	0	100	0	0	0			43	80	27	13	100	0	0	351				
	2	37	C	0	POOR	13	7			TAv	43	80	7	13	100	0	0			91											
122									EAv	43	80	30	7	100	0	0	210	80	120	0	13	100	0	0	0	108	-6	2			
	3	40	C	0	POOR	13	7			TAv	80	120	0	13	100	0	0	0													
									EAv	80	120	40	7	100	0	0	280	120	120	0	0	100	0	0	0						
	4								TAv	120	120	0	0	100	0	0	0														
									EAv	120	120	0	0	100	0	0	0														
	5								TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
122	1	32	MCL	0	GOOD	18				TAv	0	32	32	18	100	0	0	576	128	10	0	32	32	18	100	0	0	576	103	-11	3a
									EAv	0	32	0	0	100	0	0	0														
	2	24	MCL	0	POOR	12	7			TAv	32	56	18	12	100	0	0	216			32	56	24	12	100	0	0	288			
									EAv	32	56	6	7	100	0	0	42														
	3	64	HCL	0	POOR	12	7			TAv	56	120	0	12	100	0	0	0			56	120	14	12	100	0	0	168			
									EAv	56	120	64	7	100	0	0	448	120			120	0	0	100	0	0	0				
	4								TAv	120	120	0	0	100	0	0	0														
123									EAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0	108	-6	2			
	5								TAv	120	120	0	0	100	0	0	0														
									EAv	120	120	0	0	100	0	0	0														
	1	43	C	0	GOOD	17				TAv	0	43	43	17	100	0	0	731	0	43	43	17	100	0	0				731		
									EAv	0	43	0	0	100	0	0	0	43	80	27	13	100	0	0	351						
	2	37	C	0	POOR	13	7			TAv	43	80	7	13	100	0	0	91													
									EAv	43	80	30	7	100	0	0	210	80	120	0	13	100	0	0	0						
123									EAv	80	120	40	7	100	0	0	280	120	120	0	0	100	0	0	0	108	-6	2			
	3	40	C	0	POOR	13	7			TAv	80	120	0	13	100	0	0	0													
									EAv	80	120	40	7	100	0	0	280	120	120	0	0	100	0	0	0						
	4								TAv	120	120	0	0	100	0	0	0														
									EAv	120	120	0	0	100	0	0	0														
	5								TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
123									TAv	120	120	0	0	100	0	0	0	131	13	120	120	0	0	100	0	0	0	108	-6	2	
	1	43	C	0	GOOD	17				TAv	0	43	43	17	100	0	0			731	0	43	43	17	100	0	0				731
									EAv	0	43	0	0	100	0	0	0			43	80	27	13	100	0	0	351				
	2	37	C	0	POOR	13	7			TAv	43	80	7	13	100	0	0			91											
									EAv	43	80	30	7	100	0	0	210			80	120	0	13	100	0	0	0				
	3	40	C	0	POOR	13	7			TAv	80	120	0	13	100	0	0			0											
									EAv	80	120	40	7	100	0	0	280			120	120	0	0	100	0	0	0				
124									EAv	120	120	0	0	100	0	0	0	128	10	120	120	0	0	100	0	0	0	103	-11	3a	
	1	31	MCL	0	GOOD	18				TAv	0	31	31	18	100	0	0			558	0	31	31	18	100	0	0				558
									EAv	0	31	0	0	100	0	0	0														
	2	27	HCL	0	POOR	12	7			TAv	31	58	19	12	100	0	0			228	31	58	27	12	100	0	0				324
									EAv	31	58	8	7	100	0	0	56														
	3	62	HCL	0	POOR	12	7			TAv	58	120	0	12	100	0	0			0	58	120	12	12	100	0	0				144
									EAv	58	120	62	7	100	0	0	434			120	120	0	0	100	0	0	0				
124									TAv	120	120	0	0	100	0	0	0	128	10	120	120	0	0	100	0	0	0	103	-11	3a	
	4								EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0														
	5								EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0				
									EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0														

Page 19 of 27

Data inputs										Droughtiness calculations																					
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP potatoes	AP(potato) -MD(potato)	Limited to ALC grade	
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %					
133	1	43	C	0	GOOD	17				TAv	0	43	43	17	100	0	0	731	131	13	0	43	43	17	100	0	0	731	108	-6	2
									EAv	0	43	0	0	100	0	0	0														
	2	39	C	0	POOR	13	7			TAv	43	82	7	13	100	0	0	91			43	82	27	13	100	0	0	351			
									EAv	43	82	32	7	100	0	0	224														
	3	38	C	0	POOR	13	7			TAv	82	120	0	13	100	0	0	0			82	120	0	13	100	0	0	0			
									EAv	82	120	38	7	100	0	0	266														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
134										EAv	120	120	0	0	100	0	0	0	134	16	0	42	42	18	100	0	0	756	109	-5	2
	1	42	MCL	0	GOOD	18				TAv	0	42	42	18	100	0	0	756			0	42	42	18	100	0	0	756			
									EAv	0	42	0	0	100	0	0	0														
	2	53	MCL	0	POOR	12	7			TAv	42	95	8	12	100	0	0	96			42	95	28	12	100	0	0	336			
									EAv	42	95	45	7	100	0	0	315														
	3	25	C	0	POOR	13	7			TAv	95	120	0	13	100	0	0	0			95	120	0	13	100	0	0	0			
									EAv	95	120	25	7	100	0	0	175														
135										TAv	120	120	0	0	100	0	0	0	127	9	0	30	30	18	100	0	0	540	102	-12	3a
	1	30	MCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0			0	30	30	18	100	0	0	540			
										TAv	0	30	0	0	100	0	0	0													
	2	37	MCL	0	POOR	12	7			TAv	30	67	20	12	100	0	0	240			30	67	37	12	100	0	0	444			
									EAv	30	67	17	7	100	0	0	119														
	3	53	C	0	POOR	13	7			TAv	67	120	0	13	100	0	0	0			67	120	3	13	100	0	0	39			
									EAv	67	120	53	7	100	0	0	371														
136										TAv	120	120	0	0	100	0	0	0	121	3	0	24	24	17	100	0	0	408	96	-18	3a
	1	24	C	0	GOOD	17				EAv	120	120	0	0	100	0	0	0			0	24	24	17	100	0	0	408			
										TAv	0	24	0	0	100	0	0	0													
	2	52	MCL	0	POOR	12	7			EAv	0	24	0	0	100	0	0	0			24	76	46	12	100	0	0	552			
										TAv	24	76	26	7	100	0	0	182													
	3	44	C	0	POOR	13	7			EAv	24	76	26	7	100	0	0	182			76	120	0	13	100	0	0	0			
										TAv	76	120	44	7	100	0	0	308													
137										TAv	120	120	0	0	100	0	0	0	143	25	0	35	35	18	95	3	5	604	120	6	2
	1	35	MCL	5	GOOD	18		3.0	2.0	EAv	120	120	0	0	100	0	0	0			0	35	35	18	95	3	5	604			
										TAv	0	35	0	0	95	2	5	0													
	2	20	MCL	5	GOOD	21	14	3.0	2.0	EAv	35	55	15	21	95	3	5	302			35	55	20	21	95	3	5	402			
										TAv	35	55	5	14	95	2	5	67													
	3	65	C	0	POOR	13	7			EAv	55	120	0	13	100	0	0	0			55	120	15	13	100	0	0	195			
										TAv	55	120	65	7	100	0	0	455													
138										TAv	120	120	0	0	100	0	0	0	132	14	0	45	45	17	100	0	0	765	109	-5	2
	1	45	C	0	GOOD	17				EAv	120	120	0	0	100	0	0	0			0	45	45	17	100	0	0	765			
										TAv	0	45	0	0	100	0	0	0													
	2	37	C	0	POOR	13	7			EAv	0	45	0	0	100	0	0	0			45	82	25	13	100	0	0	325			
										TAv	45	82	32	7	100	0	0	224													
	3	38	C	0	POOR	13	7			EAv	82	120	0	13	100	0	0	0			82	120	0	13	100	0	0	0			
										TAv	82	120	38	7	100	0	0	266													
139										EAv	120	120	0	0	100	0	0	0	132	14	0	44	44	17	100	0	0	748	109	-5	2
	1	44	C	0	GOOD	17				TAv	0	44	44	17	100	0	0	748			0	44	44	17	100	0	0	748			
										EAv	0	44	0	0	100	0	0	0													
	2	39	C	0	POOR	13	7			TAv	44	83	6	13	100	0	0	78			44	83	26	13	100	0	0	338			
										EAv	44	83	33	7	100	0	0	231													
	3	37	C	0	POOR	13	7			TAv	83	120	0	13	100	0	0	0			83	120	0	13	100	0	0	0			
										EAv	83	120	37	7	100	0	0	259													
									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						

Data inputs										Droughtiness calculations																			Limited to ALC grade		
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP potatoes		AP(potato) -MD(potato)	
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %					
140	1	41	C	0	GOOD	17				TAv	0	41	41	17	100	0	0	697	130	12	0	41	41	17	100	0	0	697	107	-6	2
									EAv	0	41	0	0	100	0	0	0														
	2	40	C	0	POOR	13	7			TAv	41	81	9	13	100	0	0	117			41	81	29	13	100	0	0	377			
									EAv	41	81	31	7	100	0	0	217														
	3	39	C	0	POOR	13	7			TAv	81	120	0	13	100	0	0	0			81	120	0	13	100	0	0	0			
									EAv	81	120	39	7	100	0	0	273														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
142									EAv	120	120	0	0	100	0	0	0														
	1	55	C	0	GOOD	17				TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
									EAv	120	120	0	0	100	0	0	0														
	2	16	C	0	MODERATE	16	8			TAv	0	55	50	17	100	0	0	850	0	55	55	17	100	0	0	935					
									EAv	0	55	5	0	100	0	0	0														
	3	49	C	0	POOR	13	7			TAv	55	71	0	16	100	0	0	0	55	71	15	16	100	0	0	240					
									EAv	55	71	16	8	100	0	0	128														
143									TAv	71	120	0	13	100	0	0	0	71	120	0	13	100	0	0	0						
	4								EAv	71	120	49	7	100	0	0	343														
									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
	5								TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0														
144									EAv	120	120	0	0	100	0	0	0														
	1	25	HCL	0	GOOD	18				TAv	0	25	25	18	100	0	0	450	0	25	25	18	100	0	0	450					
									EAv	0	25	0	0	100	0	0	0														
	2	50	C	0	GOOD	21	15			TAv	25	75	25	21	100	0	0	525	25	75	45	21	100	0	0	945					
									EAv	25	75	25	15	100	0	0	375														
	3	45	C	0	POOR	13	7			TAv	75	120	0	13	100	0	0	0	75	120	0	13	100	0	0	0					
									EAv	75	120	45	7	100	0	0	315														
145									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
	4								TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
	5								TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0														
146									EAv	120	120	0	0	100	0	0	0														
	1	23	C	0	GOOD	17				TAv	0	23	23	17	100	0	0	391	0	23	23	17	100	0	0	391					
									EAv	0	23	0	0	100	0	0	0														
	2	39	C	0	MODERATE	16	8			TAv	23	62	27	16	100	0	0	432	23	62	39	16	100	0	0	624					
									EAv	23	62	12	8	100	0	0	96														
	3	58	C	0	POOR	13	7			TAv	62	120	0	13	100	0	0	0	62	120	8	13	100	0	0	104					
									EAv	62	120	58	7	100	0	0	406														
147									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
	4								TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
	5								TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0														
148									EAv	120	120	0	0	100	0	0	0														
	1	21	C	0	GOOD	17				TAv	0	21	21	17	100	0	0	357	0	21	21	17	100	0	0	357					
									EAv	0	21	0	0	100	0	0	0														
	2	39	C	0	GOOD	21	15			TAv	21	60	29	21	100	0	0	609	21	60	39	21	100	0	0	819					
									EAv	21	60	10	15	100	0	0	150														
	3	60	C	0	POOR	13	7			TAv	60	120	0	13	100	0	0	0	60	120	10	13	100	0	0	130					
									EAv	60	120	60	7	100	0	0	420														
149									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
	4								TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
	5								TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0														
150									EAv	120	120	0	0	100	0	0	0														
	1	21	C	0	GOOD	17				TAv	0	21	21	17	100	0	0	357	0	21	21	17	100	0	0	357					
									EAv	0	21	0	0	100	0	0	0														
	2	51	C	0	GOOD	21	15			TAv	21	72	29	21	100	0	0	609	21	72	49	21	100	0	0	1029					
									EAv	21	72	22	15	100	0	0	330														
	3	48	C	0	POOR	13	7			TAv	72	120	0	13	100	0	0	0	72	120	0	13	100	0	0	0					
									EAv	72	120	48	7	100	0	0	336														
151									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
	4								TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
	5								TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						
									EAv	120	120	0	0	100	0	0	0														
									TAv	120	120	0	0	100	0	0	0														

Data inputs										Droughtiness calculations																	Limited to ALC grade				
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat							AP wheat	AP(wheat) -MD(wheat)	AP potatoes									AP(potato) -MD(potato)			
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones			Stones %	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
147	1	28	MCL	0	GOOD	18				TAv	0	28	28	18	100	0	0	504	140	22	0	28	28	18	100	0	0	504	117	3	2
									EAv	0	28	0	0	100	0	0	0														
	2	41	HCL	0	MODERATE	16	10			TAv	28	69	22	16	100	0	0	352			28	69	41	16	100	0	0	656			
									EAv	28	69	19	10	100	0	0	190														
	3	51	MCL	0	POOR	12	7			TAv	69	120	0	12	100	0	0	0			69	120	1	12	100	0	0	12			
									EAv	69	120	51	7	100	0	0	357														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
148										EAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
	1	28	MCL	5	GOOD	18		1.0	0.5	TAv	0	28	28	18	95	1	5	480	137	19	0	28	28	18	95	1	5	480	114	0	2
									EAv	0	28	0	0	95	1	5	0														
	2	38	HCL	0	MODERATE	16	10			TAv	28	66	22	16	100	0	0	352			28	66	38	16	100	0	0	608			
									EAv	28	66	16	10	100	0	0	160														
	3	54	MCL	0	POOR	12	7			TAv	66	120	0	12	100	0	0	0			66	120	4	12	100	0	0	48			
									EAv	66	120	54	7	100	0	0	378														
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
149										EAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
	1	24	C	0	GOOD	17				TAv	0	24	24	17	100	0	0	408	135	17	0	24	24	17	100	0	0	408	112	-2	2
									EAv	0	24	0	0	100	0	0	0														
	2	37	MCL	0	MODERATE	16	10			TAv	24	61	26	16	100	0	0	416			24	61	37	16	100	0	0	592			
									EAv	24	61	11	10	100	0	0	110														
	3	59	C	0	POOR	13	7			TAv	61	120	0	13	100	0	0	0			61	120	9	13	100	0	0	117			
									EAv	61	120	59	7	100	0	0	413														
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
150										EAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
	1	23	C	0	GOOD	17				TAv	0	23	23	17	100	0	0	391	135	17	0	23	23	17	100	0	0	391	112	-2	2
									EAv	0	23	0	0	100	0	0	0														
	2	38	MCL	0	MODERATE	16	10			TAv	23	61	27	16	100	0	0	432			23	61	38	16	100	0	0	608			
									EAv	23	61	11	10	100	0	0	110														
	3	59	C	0	POOR	13	7			TAv	61	120	0	13	100	0	0	0			61	120	9	13	100	0	0	117			
									EAv	61	120	59	7	100	0	0	413														
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
151										EAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
	1	28	C	0	GOOD	17				TAv	0	28	28	17	100	0	0	476	135	17	0	28	28	17	100	0	0	476	112	-1	2
									EAv	0	28	0	0	100	0	0	0														
	2	34	MCL	0	MODERATE	16	10			TAv	28	62	22	16	100	0	0	352			28	62	34	16	100	0	0	544			
									EAv	28	62	12	10	100	0	0	120														
	3	58	C	0	POOR	13	7			TAv	62	120	0	13	100	0	0	0			62	120	8	13	100	0	0	104			
									EAv	62	120	58	7	100	0	0	406														
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
152										EAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
	1	23	C	0	GOOD	17				TAv	0	23	23	17	100	0	0	391	153	34	0	23	23	17	100	0	0	391	131	17	1
									EAv	0	23	0	0	100	0	0	0														
	2	38	MCL	0	GOOD	21	14			TAv	23	61	27	21	100	0	0	567			23	61	38	21	100	0	0	798			
									EAv	23	61	11	14	100	0	0	154														
	3	59	C	0	POOR	13	7			TAv	61	120	0	13	100	0	0	0			61	120	9	13	100	0	0	117			
									EAv	61	120	59	7	100	0	0	413														
4									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
153										EAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
	1	25	SCL	0	GOOD	17				TAv	0	25	25	17	100	0	0	425	150	31	0	25	25	17	100	0	0	425	128	14	1
									EAv	0	25	0	0	100	0	0	0														
	2	60	SC	0	GOOD	19	14			TAv	25	85	25	19	100	0	0	475			25	85	45	19	100	0	0	855			
									EAv	25	85	35	14	100	0	0	490														
	3	15	C	0	POOR	13	7			TAv	85	100	0	13	100	0	0	0			85	100	0	13	100	0	0	0			
									EAv	85	100	15	7	100	0	0	105														
4									TAv	100	100	0	0	100	0	0	0	100			100	0	0	100	0	0	0				
153										EAv	100	100	0	0	100	0	0	0	100	100	0	0	100	0	0	0					
	5									TAv	100	100	0	0	100	0	0	0	100	100	0	0	100	0	0	0					
										EAv	100	100	0	0	100	0	0	0													

Data inputs										Droughtiness calculations																							
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP potatoes	AP(potato) -MD(potato)	Limited to ALC grade			
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %							
154	1	31	MCL	5	GOOD	18		3.0	2.0	TAv	0	31	31	18	95	3	5	535	125	7	0	31	31	18	95	3	5	535	100	-14	3a		
									EAv	0	31	0	0	95	2	5	0																
	2	47	HCL	0	POOR	12	7			TAv	31	78	19	12	100	0	0	228			31	78	39	12	100	0	0	468					
									EAv	31	78	28	7	100	0	0	196																
	3	42	HCL	0	POOR	12	7			TAv	78	120	0	12	100	0	0	0			78	120	0	12	100	0	0	0					
									EAv	78	120	42	7	100	0	0	294																
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0					
155	1	39	MCL	0	GOOD	18				EAv	120	120	0	0	100	0	0	0	132	14	120	120	0	0	100	0	0	0	107	-6	2		
									TAv	0	39	39	18	100	0	0	702	0			39	39	18	100	0	0	702						
	2	30	MCL	0	POOR	12	7			EAv	0	39	0	0	100	0	0	0			39	69	30	12	100	0	0	360					
									TAv	39	69	11	12	100	0	0	132																
	3	51	HCL	0	POOR	12	7			EAv	39	69	19	7	100	0	0	133			69	120	1	12	100	0	0	12					
									TAv	69	120	0	12	100	0	0	0																
	4									EAv	69	120	51	7	100	0	0	357			120	120	0	0	100	0	0	0					
156	1	23	HCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	135	17	120	120	0	0	100	0	0	0	110	-4	2		
									EAv	120	120	0	0	100	0	0	0																
	2	31	MCL	0	MODERATE	16	10			TAv	0	23	23	18	100	0	0	414			0	23	23	18	100	0	0	414					
									EAv	0	23	0	0	100	0	0	0																
	3	66	HCL	0	POOR	12	7			TAv	23	54	27	16	100	0	0	432			23	54	31	16	100	0	0	496					
									EAv	23	54	4	10	100	0	0	40																
	4									TAv	54	120	0	12	100	0	0	0			54	120	16	12	100	0	0	192					
157	1	22	C	0	GOOD	17				EAv	54	120	66	7	100	0	0	462	132	14	120	120	0	0	100	0	0	0	108	-6	2		
									TAv	120	120	0	0	100	0	0	0																
	2	32	MCL	0	MODERATE	16	10			EAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0					
									TAv	0	22	22	17	100	0	0	374	0			22	22	17	100	0	0	374						
	3	66	HCL	0	POOR	12	7			EAv	0	22	0	0	100	0	0	0															
									TAv	22	54	28	16	100	0	0	448	22			54	32	16	100	0	0	512						
	4									EAv	22	54	4	10	100	0	0	40															
158	1	35	C	0	GOOD	17				TAv	54	120	0	12	100	0	0	0	133	15	54	120	16	12	100	0	0	192	124	10	2		
									EAv	54	120	66	7	100	0	0	462																
	2	20	C	5	GOOD	21	15	1.0	0.5	TAv	120	120	0	0	100	0	0	0			54	120	15	16	100	0	0	240					
									EAv	55	100	45	8	100	0	0	360																
	3	45	C	0	MODERATE	16	8			TAv	100	100	0	0	100	0	0	0			100	100	0	0	100	0	0	0					
									EAv	100	100	0	0	100	0	0	0																
	4									TAv	100	100	0	0	100	0	0	0			100	100	0	0	100	0	0	0					
159	1	20	C	0	GOOD	17				EAv	100	100	0	0	100	0	0	0	131	13	0	20	20	17	100	0	0	340	108	-6	2		
									TAv	0	20	20	17	100	0	0	0																
	2	30	C	0	MODERATE	16	8			EAv	0	20	0	0	100	0	0	0			20	50	30	16	100	0	0	480					
									TAv	20	50	0	8	100	0	0	0																
	3	70	C	0	POOR	13	7			EAv	50	120	0	13	100	0	0	0			50	120	20	13	100	0	0	260					
									TAv	50	120	70	7	100	0	0	490																
	4									EAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0					
160	1	35	C	0	GOOD	17				TAv	120	120	0	0	100	0	0	0	133	15	120	120	0	0	100	0	0	0	111	-3	2		
									EAv	120	120	0	0	100	0	0	0																
	2	20	C	0	MODERATE	16	8			TAv	0	35	35	17	100	0	0	595			0	35	35	17	100	0	0	595					
									EAv	0	35	0	0	100	0	0	0																
	3	65	C	0	POOR	13	7			TAv	35	55	15	16	100	0	0	240			35	55	20	16	100	0	0	320					
									EAv	35	55	5	8	100	0	0	40																
	4									TAv	55	120	0	13	100	0	0	0			55	120	15	13	100	0	0	195					

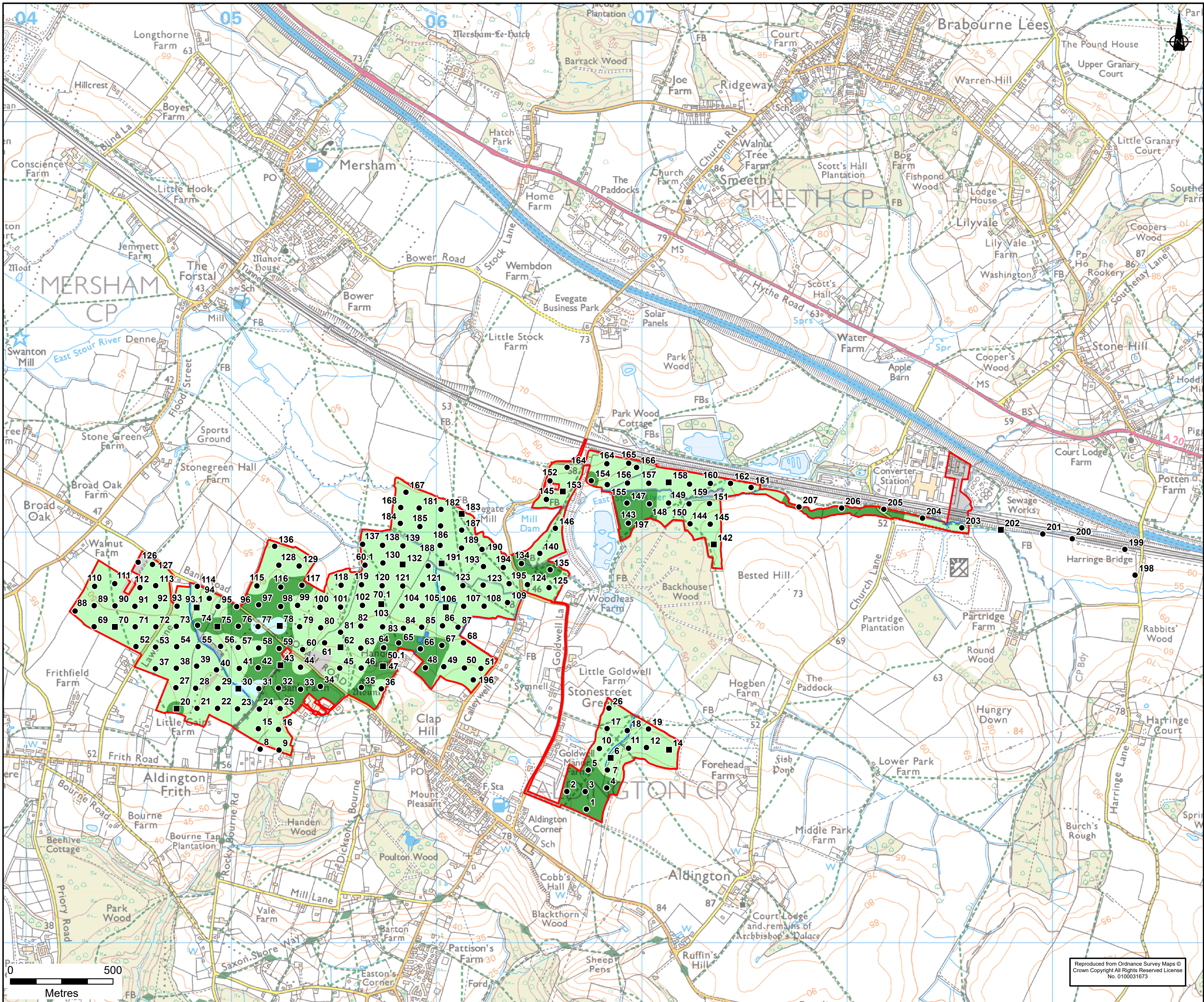
Data inputs										Droughtiness calculations																					
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								Limited to ALC grade			
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)		
161	1	23	C	0	GOOD	17				TAv	0	23	23	17	100	0	0	391	132	14	0	23	23	17	100	0	0	391	111	-3	2
									EAv	0	23	0	0	100	0	0	0														
	2	37	C	0	MODERATE	16	8			TAv	23	60	27	16	100	0	0	432			23	60	37	16	100	0	0	592			
									EAv	23	60	10	8	100	0	0	80														
	3	60	C	0	POOR	13	7			TAv	60	120	0	13	100	0	0	0			60	120	10	13	100	0	0	130			
									EAv	60	120	60	7	100	0	0	420														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
162										EAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
	1	23	C	0	GOOD	17				TAv	120	120	0	0	100	0	0	0	0												
										EAv	120	120	0	0	100	0	0	0	0												
	2	38	C	0	MODERATE	16	8			TAv	0	23	23	17	100	0	0	391	0	23	23	17	100	0	0	391	112	-2	2		
										EAv	0	23	0	0	100	0	0	0													
	3	59	C	0	POOR	13	7			TAv	23	61	27	16	100	0	0	432	23	61	38	16	100	0	0	608					
										EAv	23	61	11	8	100	0	0	88													
4									TAv	61	120	0	13	100	0	0	0	61	120	9	13	100	0	0	117						
									EAv	61	120	59	7	100	0	0	413														
164										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
	1	30	C	0	GOOD	17				TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
	2	29	C	0	MODERATE	16	8			TAv	0	30	30	17	100	0	0	510	0	30	30	17	100	0	0	510	112	-2	2		
										EAv	0	30	0	0	100	0	0	0													
	3	61	C	0	POOR	13	7			TAv	30	59	20	16	100	0	0	320	30	59	29	16	100	0	0	464					
										EAv	30	59	9	8	100	0	0	72													
4									TAv	59	120	0	13	100	0	0	0	59	120	11	13	100	0	0	143						
									EAv	59	120	61	7	100	0	0	427														
164										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
	5									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
	1	30	C	0	GOOD	17				TAv	0	30	30	17	100	0	0	510	0	30	30	17	100	0	0	510	112	-2	2		
										EAv	0	30	0	0	100	0	0	0													
	2	29	C	0	MODERATE	16	8			TAv	30	59	20	16	100	0	0	320	30	59	29	16	100	0	0	464					
									EAv	30	59	9	8	100	0	0	72														
3	61	C	0	POOR	13	7			TAv	59	120	0	13	100	0	0	0	59	120	11	13	100	0	0	143						
									EAv	59	120	61	7	100	0	0	427														
165										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
	5									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
	1	29	MCL	5	GOOD	18		1.0	0.5	TAv	0	29	29	18	95	1	5	497	0	29	29	18	95	1	5	497	99	-15	3a		
										EAv	0	29	0	0	95	1	5	0													
	2	30	MCL	0	POOR	12	7			TAv	29	59	21	12	100	0	0	252	29	59	30	12	100	0	0	360					
									EAv	29	59	9	7	100	0	0	63														
3	61	HCL	0	POOR	12	7			TAv	59	120	0	12	100	0	0	0	59	120	11	12	100	0	0	132						
									EAv	59	120	61	7	100	0	0	427														
166										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
	1	20	C	0	GOOD	17				TAv	0	20	20	17	100	0	0	340	0	20	20	17	100	0	0	340	101	-12	3a		
										EAv	0	20	0	0	100	0	0	0													
	2	36	MCL	15	MODERATE	16	10	3.0	2.0	TAv	20	56	30	16	85	3	15	422	20	56	36	16	85	3	15	506					
										EAv	20	56	6	10	85	2	15	53													
	3	64	HCL	0	POOR	12	7			TAv	56	120	0	12	100	0	0	0	56	120	14	12	100	0	0	168					
									EAv	56	120	64	7	100	0	0	448														
167										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
	1	23	HCL	0	GOOD	18				TAv	0	23	23	18	100	0	0	414	0	23	23	18	100	0	0	414	98	-16	3a		
										EAv	0	23	0	0	100	0	0	0													
	2	35	MCL	0	POOR	12	7			TAv	23	58	27	12	100	0	0	324	23	58	35	12	100	0	0	420					
										EAv	23	58	8	7	100	0	0	56													
	3	62	HCL	0	POOR	12	7			TAv	58	120	0	12	100	0	0	0	58	120	12	12	100	0	0	144					
									EAv	58	120	62	7	100	0	0	434														
									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0						

Data inputs										Droughtiness calculations																	Limited to ALC grade				
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)			
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes				
168	1	23	C	0	GOOD	17				TAv	0	23	23	17	100	0	0	391	123	5	0	23	23	17	100	0	0	391	100	-14	3a
									EAv	0	23	0	0	100	0	0	0														
	2	32	C	0	POOR	13	7			TAv	23	55	27	13	100	0	0	351			23	55	32	13	100	0	0	416			
										EAv	23	55	5	7	100	0	0	35													
	3	65	C	0	POOR	13	7			TAv	55	120	0	13	100	0	0	0			55	120	15	13	100	0	0	195			
										EAv	55	120	65	7	100	0	0	455													
										TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
181										EAv	120	120	0	0	100	0	0	0													
	1	38	HCL	0	GOOD	18				TAv	0	38	38	18	100	0	0	684	132	14	0	38	38	18	100	0	0	684	107	-7	2
										EAv	0	38	0	0	100	0	0	0													
	2	29	HCL	0	POOR	12	7			TAv	38	67	12	12	100	0	0	144			38	67	29	12	100	0	0	348			
										EAv	38	67	17	7	100	0	0	119													
	3	53	C	0	POOR	13	7			TAv	67	120	0	13	100	0	0	0			67	120	3	13	100	0	0	39			
										EAv	67	120	53	7	100	0	0	371													
									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
182										EAv	120	120	0	0	100	0	0	0													
	1	39	HCL	0	GOOD	18				TAv	0	39	39	18	100	0	0	702	132	14	0	39	39	18	100	0	0	702	107	-6	2
										EAv	0	39	0	0	100	0	0	0													
	2	32	HCL	0	POOR	12	7			TAv	39	71	11	12	100	0	0	132			39	71	31	12	100	0	0	372			
										EAv	39	71	21	7	100	0	0	147													
	3	49	C	0	POOR	13	7			TAv	71	120	0	13	100	0	0	0			71	120	0	13	100	0	0	0			
										EAv	71	120	49	7	100	0	0	343													
									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
183										EAv	120	120	0	0	100	0	0	0													
	1	35	HCL	0	GOOD	18				TAv	0	35	35	18	100	0	0	630	130	12	0	35	35	18	100	0	0	630	105	-9	2
										EAv	0	35	0	0	100	0	0	0													
	2	34	HCL	0	POOR	12	7			TAv	35	69	15	12	100	0	0	180			35	69	34	12	100	0	0	408			
										EAv	35	69	19	7	100	0	0	133													
	3	51	C	0	POOR	13	7			TAv	69	120	0	13	100	0	0	0			69	120	1	13	100	0	0	13			
										EAv	69	120	51	7	100	0	0	357													
									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
184										EAv	120	120	0	0	100	0	0	0													
	1	37	HCL	0	GOOD	18				TAv	0	37	37	18	100	0	0	666	131	13	0	37	37	18	100	0	0	666	106	-8	2
										EAv	0	37	0	0	100	0	0	0													
	2	32	HCL	0	POOR	12	7			TAv	37	69	13	12	100	0	0	156			37	69	32	12	100	0	0	384			
										EAv	37	69	19	7	100	0	0	133													
	3	51	C	0	POOR	13	7			TAv	69	120	0	13	100	0	0	0			69	120	1	13	100	0	0	13			
										EAv	69	120	51	7	100	0	0	357													
									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
185										EAv	120	120	0	0	100	0	0	0													
	1	35	HCL	0	GOOD	18				TAv	0	35	35	18	100	0	0	630	130	12	0	35	35	18	100	0	0	630	105	-9	2
										EAv	0	35	0	0	100	0	0	0													
	2	39	HCL	0	POOR	12	7			TAv	35	74	15	12	100	0	0	180			35	74	35	12	100	0	0	420			
										EAv	35	74	24	7	100	0	0	168													
	3	46	C	0	POOR	13	7			TAv	74	120	0	13	100	0	0	0			74	120	0	13	100	0	0	0			
										EAv	74	120	46	7	100	0	0	322													
									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
186										EAv	120	120	0	0	100	0	0	0													
	1	38	HCL	0	GOOD	18				TAv	0	38	38	18	100	0	0	684	132	14	0	38	38	18	100	0	0	684	107	-7	2
										EAv	0	38	0	0	100	0	0	0													
	2	32	HCL	0	POOR	12	7			TAv	38	70	12	12	100	0	0	144			38	70	32	12	100	0	0	384			
										EAv	38	70	20	7	100	0	0	140													
	3	50	C	0	POOR	13	7			TAv	70	120	0	13	100	0	0	0			70	120	0	13	100	0	0	0			
										EAv	70	120	50	7	100	0	0	350													
									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
										EAv	120	120	0	0	100	0	0	0													
	1	38	HCL	0	GOOD	18				TAv	0	38	38	18	100	0	0	684	132	14	0	38	38	18	100	0	0	684	107	-7	2
										EAv	0	38	0	0	100	0	0	0													
	2	32	HCL	0	POOR	12	7			TAv	38	70	12	12	100	0	0	144			38	70	32	12	100	0	0	384			
										EAv	38	70	20	7	100	0	0	140													
	3	50	C	0	POOR	13	7			TAv	70	120	0	13	100	0	0	0			70	120	0	13	100	0	0	0			
										EAv	70	120	50	7	100	0	0	350													
									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
										EAv	120	120	0	0	100	0	0	0													
	1	38	HCL	0	GOOD	18				TAv	0	38	38	18	100	0	0	684	132	14	0	38	38	18	100	0	0	684	107	-7	2
										EAv	0	38	0	0	100	0	0	0													
	2	32	HCL	0	POOR	12	7			TAv	38	70	12	12	100	0	0	144			38	70	32	12	100	0	0	384			
										EAv	38	70	20	7	100	0	0	140													
	3	50	C	0	POOR	13	7			TAv	70	120	0	13	100	0	0	0			70	120	0	13	100	0	0	0			
										EAv	70	120	50	7	100	0	0	350													
									TAv	120	120	0	0	100	0	0	0	120			120	0	0	100	0	0	0				
										EAv	120	120	0	0	100	0	0	0													
	1	38	HCL	0	GOOD	18				TAv	0	38	38	18	100	0	0	684	132	14	0	38	38	18	100	0	0	684	107	-7	2
										EAv	0	38	0	0	100	0	0	0													
	2	32	HCL	0	POOR	12	7			TAv	38	70	12	12	100	0	0	144			38	70	32	12	100	0	0	384			
										EAv	38	70	20	7	100	0	0	140													
	3	50	C	0	POOR	13	7			TAv	70	120	0	13	100	0	0	0			70	120	0	13	100						

Data inputs										Droughtiness calculations																		Limited to ALC grade			
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP(wheat) -MD(wheat)	AP potatoes								AP(potato) -MD(potato)				
						TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %		AP wheat	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %			AP potatoes		
187	1	35	HCL	0	GOOD	18				TAv	0	35	35	18	100	0	0	630	139	20	0	35	35	18	100	0	0	630	109	-5	2
									EAv	0	35	0	0	100	0	0	0														
	2	36	SCL	0	POOR	13	8			TAv	35	71	15	13	100	0	0	195			35	71	35	13	100	0	0	455			
									EAv	35	71	21	8	100	0	0	168														
	3	49	SCL	0	POOR	13	8			TAv	71	120	0	13	100	0	0	0			71	120	0	13	100	0	0	0			
									EAv	71	120	49	8	100	0	0	392														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
188										EAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
	1	36	HCL	0	GOOD	18				TAv	120	120	0	0	100	0	0	0	0												
										EAv	120	120	0	0	100	0	0	0													
	2	31	HCL	0	POOR	12	7			TAv	0	36	36	18	100	0	0	648	0	36	36	18	100	0	0	648					
										EAv	0	36	0	0	100	0	0	0													
	3	53	C	0	POOR	13	7			TAv	36	67	14	12	100	0	0	168	36	67	31	12	100	0	0	372					
										EAv	36	67	17	7	100	0	0	119													
189	4									TAv	67	120	0	13	100	0	0	0	67	120	3	13	100	0	0	39					
										EAv	67	120	53	7	100	0	0	371													
	5									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
										EAv	120	120	0	0	100	0	0	0													
190	1	35	HCL	0	GOOD	18				TAv	0	35	35	18	100	0	0	630	130	12	0	35	35	18	100	0	0	630	105	-9	2
									EAv	0	35	0	0	100	0	0	0														
	2	36	HCL	0	POOR	12	7			TAv	35	71	15	12	100	0	0	180			35	71	35	12	100	0	0	420			
										EAv	35	71	21	7	100	0	0	147													
	3	49	C	0	POOR	13	7			TAv	71	120	0	13	100	0	0	0			71	120	0	13	100	0	0	0			
										EAv	71	120	49	7	100	0	0	343													
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
191										EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
	5									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0													
										EAv	120	120	0	0	100	0	0	0													
192	1	37	HCL	0	GOOD	18				TAv	0	37	37	18	100	0	0	666	131	13	0	37	37	18	100	0	0	666	106	-8	2
									EAv	0	37	0	0	100	0	0	0														
	2	32	HCL	0	POOR	12	7			TAv	37	69	13	12	100	0	0	156			37	69	32	12	100	0	0	384			
										EAv	37	69	19	7	100	0	0	133													
	3	51	C	0	POOR	13	7			TAv	69	120	0	13	100	0	0	0			69	120	1	13	100	0	0	13			
										EAv	69	120	51	7	100	0	0	357													
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
193										EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
	5									TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0													
										EAv	120	120	0	0	100	0	0	0													
193	1	36	MCL	0	GOOD	18				TAv	0	36	36	18	100	0	0	648	141	23	0	36	36	18	100	0	0	648	116	2	2
									EAv	0	36	0	0	100	0	0	0														
	2	35	SCL	0	MODERATE	15	10			TAv	36	71	14	15	100	0	0	210			36	71	34	15	100	0	0	510			
										EAv	36	71	21	10	100	0	0	210													
	3	49	C	0	POOR	13	7			TAv	71	120	0	13	100	0	0	0			71	120	0	13	100	0	0	0			
										EAv	71	120	49	7	100	0	0	343													
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
193										EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0	120	120	0	0	100	0	0	0					
										EAv	120	120	0	0	100	0	0	0													
										TAv	120	120	0	0	100	0	0	0													
										EAv	120	120	0	0	100	0	0	0													

Data inputs										Droughtiness calculations																			Limited to ALC grade		
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	Av. water (soil)		Av. water (stones)		AP wheat								AP wheat	AP(wheat) -MD(wheat)	AP potatoes								AP potatoes		AP(potato) -MD(potato)	
						TAv %	%EAv %	TAv %	%EAv %	TAv/EAv	Start depth	End depth	Horiz. thckn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %			Start depth	End depth	Horiz. thckn.	TAv top/sub soil	non-stone %	TAv stones	Stone %					
194	1	36	HCL	0	GOOD	18				TAv	0	36	36	18	100	0	0	648	131	13	0	36	36	18	100	0	0	648	106	-8	2
									EAv	0	36	0	0	100	0	0	0														
	2	36	HCL	0	POOR	12	7			TAv	36	72	14	12	100	0	0	168			36	72	34	12	100	0	0	408			
									EAv	36	72	22	7	100	0	0	154														
	3	48	C	0	POOR	13	7			TAv	72	120	0	13	100	0	0	0			72	120	0	13	100	0	0	0			
									EAv	72	120	48	7	100	0	0	336														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
										EAv	120	120	0	0	100	0	0	0													
195	1	39	HCL	0	GOOD	18				TAv	0	39	39	18	100	0	0	702	132	14	0	39	39	18	100	0	0	702	108	-6	2
									EAv	0	39	0	0	100	0	0	0														
	2	29	HCL	0	POOR	12	7			TAv	39	68	11	12	100	0	0	132			39	68	29	12	100	0	0	348			
									EAv	39	68	18	7	100	0	0	126														
	3	52	C	0	POOR	13	7			TAv	68	120	0	13	100	0	0	0			68	120	2	13	100	0	0	26			
									EAv	68	120	52	7	100	0	0	364														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
										EAv	120	120	0	0	100	0	0	0													
196	1	38	HCL	0	GOOD	18				TAv	0	38	38	18	100	0	0	684	132	14	0	38	38	18	100	0	0	684	107	-7	2
									EAv	0	38	0	0	100	0	0	0														
	2	33	HCL	0	POOR	12	7			TAv	38	71	12	12	100	0	0	144			38	71	32	12	100	0	0	384			
									EAv	38	71	21	7	100	0	0	147														
	3	49	C	0	POOR	13	7			TAv	71	120	0	13	100	0	0	0			71	120	0	13	100	0	0	0			
									EAv	71	120	49	7	100	0	0	343														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
										EAv	120	120	0	0	100	0	0	0													
197	1	39	MCL	0	GOOD	18				TAv	0	39	39	18	100	0	0	702	147	29	0	39	39	18	100	0	0	702	117	3	2
									EAv	0	39	0	0	100	0	0	0														
	2	31	SCL	0	MODERATE	15	10			TAv	39	70	11	15	100	0	0	165			39	70	31	15	100	0	0	465			
									EAv	39	70	20	10	100	0	0	200														
	3	50	SCL	0	POOR	13	8			TAv	70	120	0	13	100	0	0	0			70	120	0	13	100	0	0	0			
									EAv	70	120	50	8	100	0	0	400														
	4									TAv	120	120	0	0	100	0	0	0			120	120	0	0	100	0	0	0			
										EAv	120	120	0	0	100	0	0	0													

DRAWING GM12014/002



KEY

- Order limits
- Auger Core
- Soil Pit

Agricultural Land Classification

- Grade 2
- Subgrade 3a
- Subgrade 3b
- Non Agricultural
- Watercourses

Notes:

Boundaries are indicative.

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REVISION	DETAILS	DATE	DRAWN	CHECKED	APPROVED
CLIENT	EPL 001 Limited				
PROJECT	STONE STREET GREEN SOLAR				
DRAWING TITLE	AGRICULTURAL LAND CLASSIFICATION				
DRG No	GM12014/002 APFP 5(2)(a)	REV	01		
DRG SIZE	A2	SCALE	1:12,500	DATE	May 2024
DRAWN BY	SW	CHECKED BY	KE	APPROVED BY	HK

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