Stonestreet Green Solar

Environmental Statement
Volume 4: Appendices
Chapter 16: Other Topics
Appendix 16.1: Soils and Agricultural Land Report

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APFP Regulation 5(2)(a)
Planning Act 2008
The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

CONTENTS

FIGURES

TABLES

APPENDICES

DRAWINGS

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.

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

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**

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."*

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,

2 Overarching National Policy Statement for Energy (EN-1) (2023). Available at: https://assets.publishing.service.gov.uk/media/65bbfbdc709fe1000f637052/overarching-nps-for-energy-en1.pdf Accessed April 2024

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

"The Powering Up Britain: Energy Security Plan[4] 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 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"*.

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

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 2009[5] 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 by[7]:

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;

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

[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.

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 Sites[9] 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

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

[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

Ashford Borough

2.6.1 Current planning policy for Ashford Borough is set out in the Ashford Borough Local Plan 2030[10], 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 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

[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

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 Environment[11];
- Natural England, (2009). Technical Information Note 049 (TIN049): Agricultural Land Classification: Protecting the Best and Most Versatile Agricultural Land[12];
- Natural England (2021). Guide to Assessing Development Proposals on Agricultural Land[13]
- Defra (2018). Construction Code of Practice for the Sustainable Use of Soils on Construction Sites[14]; and
- MAFF (1988). Agricultural Land Classification of England and Wales: Revised Guidelines and Criteria for Grading the Quality of Agricultural Land.[15]

[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
[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

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 Wales[17];
- Soil Survey of England and Wales (1984). Soils and their Use in South East England, with accompanying 1: 250,000 map, Sheet 2[18];
- OS (2021). Terrain 5 Digital Terrain Modelling[19];
- Multi-Agency Geographical Information for the Countryside ('MAGIC')[20];
- Google Maps including Streetview[21];
- Munsell (2010) Colour Charts[22]; and
- Cranfield University (2015). Research to develop the evidence base on soil erosion and water use in agriculture[23].

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

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 land[24] 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 17025[25]. 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

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

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.

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.	

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	

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.

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.	

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)

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 %
Provisional ALC		
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**
Post-1988 ALC		
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**

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 %**
Provisional ALC + Post 1988		
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.**		

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.

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 course 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 (^{0}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

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.

5.6 ALC in wider context

[26]To 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.

5.6.1 The majority of land within the Order limits 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 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 Sites[9], 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 mapping[9] 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-manganifeours concertions
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 - Gravel[1] with non-porous (hard) stones; GRS - Gravel[1] 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	Grad-ient	Soil distur-bed or resto-red	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)	Abundan-ce 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 %	Biopo-res	Stones and rocks			Structure			Consis-tence	Calca-reous	Gley-ing	SPL	Notes
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Deve-lop-ment	Ped size					
1	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	yes	0	0	n/a	PR	W	C	FIR	no	YES	NO	
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	M	FIR	no	YES	NO	-
2	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	yes	0	0	n/a	PR	W	C	FIR	no	YES	NO	
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	M	FIR	no	YES	NO	-
3	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	M	M	FR	no	NO	NO	
	yes	10YR	5	4	0	yes	0	0	n/a	PR	W	C	FIR	no	YES	NO	
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	M	FIR	no	YES	NO	-
4	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	C	FIR	no	NO	NO	
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	W	C	FIR	no	NO	NO	
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	M	FIR	no	YES	NO	-
5	no	n/a	n/a	n/a	0	yes	0	0	n/a	AB	M	M	FR	no	NO	NO	
	yes	2.5Y	6	3	0	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	M	M	FIR	no	YES	YES	-
6	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	M	FIR	no	NO	NO	
	no	n/a	n/a	n/a	0	yes	0	0	n/a	PR	M	C	VFIR	no	NO	NO	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	VC	VFIR	no	YES	YES	-
7	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	-
8	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	-
9	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	PR	M	M	FR	no	NO	YES	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	C	FR	no	NO	YES	-
10	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	PR	S	C	EXFIR	no	NO	YES	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES	-
11	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	PR	S	C	EXFIR	no	NO	YES	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	NO	-
12	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	PR	S	C	EXFIR	no	NO	YES	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	NO	-
14	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	C	FR	no	NO	NO	
	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	W	C	FIR	no	YES	NO	
	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	W	C	VFIR	no	NO	YES	-
15	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	-
16	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	20	no	0	0	n/a	PR	M	M	FR	no	NO	YES	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES	-
17	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	2	no	0	0	n/a	PR	W	C	VFIR	no	YES	YES	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	C	FR	no	NO	YES	-
	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	PR	S	C	EXFIR	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**	**Droughti-ness**	**Other (see "Limited by" column)**	**ALC Grade**	**Limited by**
1	2	1	1	1	1	1	1	1	2	3a	1	**3a**	Droughti-ness
2	2	1	1	1	1	1	1	1	2	3a	1	**3a**	Droughti-ness
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	Grad-ient	Soil distur-bed or resto-red	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)	Abundan-ce up to %	Hue	Value	Chroma
18	**Core**	0	no	3	120	C	5Y	7	1	n/a	n/a	n/a	n/a	n/a	40	2.5Y	6	6
				4														
				5														
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 %	Biopo-res	Stones and rocks			Structure			Consis-tence	Calca-reous	Gley-ing	SPL	Notes
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Deve-lop-ment	Ped size					
18	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	NO	-
	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	
19	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	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	
20	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	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	
21	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	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	
22	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	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	
23	no	n/a	n/a	n/a	20	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES	-
	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	
24	no	n/a	n/a	n/a	20	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES	firm subsoil
	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	
25	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	W	C	FR	no	NO	YES	-
	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	
26	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES	lesser 2nd horizon
	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	
27	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	FIR	no	YES	YES	-
	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	
28	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	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	
29	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	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	
30	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	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	
31	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	yes	10	0	SS	SAB	M	M	FIR	no	NO	NO	
	no	n/a	n/a	n/a	0	yes	5	10	SS	AB	M	C	EXFIR	no	NO	NO	
32	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	S	C	VFIR	no	YES	YES	stone abundant
	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	
33	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	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	
34	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**	**Droughti-ness**	**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 Droughti-ness
32	2	1	1	1	1	1	1	2	2	3a	1	**3a**	Droughti-ness
33	2	1	1	1	1	1	1	2	2	3a	1	**3a**	Droughti-ness
34	3	1	1	1	1	1	1	1	3a	3a	1	**3a**	Wetness Droughti-ness

Soil profile descriptions

Survey point	Type	Grad-ient	Soil distur-bed or resto-red	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)	Abundan-ce up to %	Hue	Value	Chroma
				5														
				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
35	**Core**	0	no	3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
				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
36	**Core**	1	no	3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				4														
				5														
				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
37	**Core**	1	no	3	120	HCL	10YR	8	1	n/a	n/a	n/a	n/a	n/a	40	10YR	5	8
				4														
				5														
				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
38	**Core**	1	no	3	120	HCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	100	10YR	5	6
				4														
				5														
				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
39	**Core**	1	no	3	120	HCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	100	10YR	5	6
				4														
				5														
				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
40	**Core**	5	no	3	120	HCL	10YR	7	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
				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
41	**Core**	2	no	3	120	HCL	10YR	7	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
				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
42	**Core**	2	no	3	120	HCL	2.5YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
				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
43	**Pit**	1	no	3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
				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
44	**Core**	0	no	3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
				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
45	**Core**	3	no	3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
				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
46	**Core**	0	no	3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
				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
47	**Pit**	2	no	3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
				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
48	**Pit**	1	no	3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
				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
49	**Core**	2	no	3	120	HCL	10YR	6	2	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
				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
50	**Core**	0	no	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	Biopo-	Stones and rocks			Structure			Consis-	Calca-	Gley-	SPL	Notes
	Colour different to matrix	Hue	Value	Chroma	up to %	res	> 2 cm up to %	> 6 cm up to %	Type	Type	Deve- lop- ment	Ped size	tence	reous	ing		
	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	
35	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	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	
36	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	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	
37	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	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	
38	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	FIR	no	YES	YES	firm topsoil
	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	
39	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	FIR	no	YES	YES	-
	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	NO	
40	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES	-
	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	NO	
41	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES	-
	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	
42	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	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	
43	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	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	
44	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	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	
45	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	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	
46	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	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	NO	
47	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	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	
48	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	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	
49	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	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	
50	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**	**Droughti-ness**	**Other (see "Limited by" column)**	**ALC Grade**	**Limited by**
35	3	1	1	1	1	1	1	1	3a	3a	1	**3a**	Wetness Droughti-ness
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 Droughti-ness
43	2	1	1	1	1	1	1	1	3a	3a	1	**3a**	Wetness Droughti-ness
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	Grad-ient	Soil distur-bed or resto-red	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)	Abundan-ce 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 %	Biopo-res	Stones and rocks			Structure			Consis-tence	Calca-reous	Gley-ing	SPL	Notes
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Deve-lop-ment	Ped size					
51	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	-
52	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	Flat field
53	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	-
54	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	bright orange mottles over grey. Topsoil structure firm
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	FIR	no	YES	YES	
55	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	AB	M	VC	VFIR	no	NO	YES	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	VFIR	no	YES	YES	-
56	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	5	0	SS	AB	S	C	VFIR	no	YES	YES	-
57	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	-
58	no	n/a	n/a	n/a	0	yes	5	5	SS	SAB	M	M	FIR	no	NO	NO	
	no	n/a	n/a	n/a	0	yes	10	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	-
59	no	n/a	n/a	n/a	0	yes	0	0	n/a	AB	M	M	FR	no	NO	NO	
	no	n/a	n/a	n/a	2	no	0	0	n/a	AB	M	C	VFIR	no	NO	YES	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	EXFIR	no	YES	YES	-
60	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	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	-
61	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	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	-
62	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	20	no	5	5	H	PR	M	C	VFIR	no	YES	YES	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	EXFIR	no	YES	YES	-
63	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	20	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	M	C	EXFIR	no	YES	NO	-
64	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	20	no	0	0	n/a	SAB	M	M	VFIR	no	YES	NO	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	M	C	EXFIR	no	YES	YES	-
65	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	20	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	C	VFIR	no	YES	YES	-
66	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	20	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	C	VFIR	no	YES	YES	-
67	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	20	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	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**	**Droughti-ness**	**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	Grad-ient	Soil distur-bed or resto-red	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)	Abundan-ce 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 %	Biopo-res	Stones and rocks			Structure			Consis-tence	Calca-reous	Gley-ing	SPL	Notes
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Deve-lop-ment	Ped size					
	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	
68	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	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	
69	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	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	
70	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	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	
71	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	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	
72	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	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	
73	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	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	
74	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	C	VFIR	no	NO	YES	-
	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	
75	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	C	VFIR	no	NO	YES	-
	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	
76	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	C	VFIR	no	NO	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	2	no	0	0	n/a	AB	M	M	FIR	no	NO	NO	
77	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	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	
78	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	W	F	FR	no	YES	YES	-
	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	
79	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	W	F	FR	no	YES	YES	-
	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	
80	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	W	F	FR	no	YES	YES	-
	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	
81	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	M	VFIR	no	YES	YES	-
	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	
82	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	W	M	VFIR	no	YES	NO	-
	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	
83	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**	**Droughti-ness**	**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**	Droughti-ness
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 Droughti-ness
78	2	1	1	1	1	1	1	2	2	2	1	**2**	Topsoil stoniness Wetness Droughti-ness
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	Grad-ient	Soil distur-bed or resto-red	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)	Abundan-ce 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 %	Biopo-res	Stones and rocks			Structure			Consis-tence	Calca-reous	Gley-ing	SPL	Notes
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Deve-lop-ment	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	
	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	slight water logging patch
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	
	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	mottling in 1-2 horizon then nearly pure grey in 3
91	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	poached cattle field
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	NO	
	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	

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**	**Droughti-ness**	**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 Droughti-ness
97	3	1	1	1	1	1	1	3a	3a	3a	1	**3a**	Topsoil stoniness Wetness Droughti-ness
98	3	1	1	1	1	1	1	1	3a	3a	1	**3a**	Wetness Droughti-ness

Soil profile descriptions

Survey point	Type	Grad-ient	Soil distur-bed or resto-red	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)	Abundan-ce up to %	Hue	Value	Chroma
99	Core	3	no	3	120	HCL	10YR	6	4	n/a	n/a	n/a	n/a	n/a	20	10YR	6	6
				4														
				5														
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 %	Biopo-res	Stones and rocks			Structure			Consis-tence	Calca-reous	Gley-ing	SPL	Notes
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Deve-lop-ment	Ped size					
99	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	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	
100	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	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	
101	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	VFIR	no	YES	NO	-
	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	
102	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	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	
103	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	M	F	EXFIR	no	YES	NO	-
	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	
104	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	M	F	EXFIR	no	YES	NO	-
	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	
105	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	M	F	EXFIR	no	YES	NO	-
	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	
106	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	F	EXFIR	no	YES	NO	-
	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	
107	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	F	EXFIR	no	YES	NO	-
	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	
108	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	M	F	EXFIR	no	YES	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	
109	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES	more mottling in 1st 2nd horizon then 40% in 3rd
	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	
110	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	yes	5	5	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	
111	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES	stones near shed
	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	
112	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	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	
113	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	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	
114	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO	-
	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	
115	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**	**Droughti-ness**	**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	Grad-ient	Soil distur-bed or resto-red	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)	Abundan-ce 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 %	Biopo-res	Stones and rocks			Structure			Consis-tence	Calca-reous	Gley-ing	SPL	Notes
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Deve-lop-ment	Ped size					
	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	
116	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	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	
117	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	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	
118	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO	-
	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	
119	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO	-
	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	
120	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO	-
	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	
121	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO	-
	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	
121	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO	-
	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	
122	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES	-
	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	
123	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO	-
	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	
123	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	NO	-
	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	
124	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	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	
125	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	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	
126	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	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	
127	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	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	
128	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	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	
129	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**	**Droughti-ness**	**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	Grad-ient	Soil distur-bed or resto-red	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)	Abundan-ce 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 %	Biopo-res	Stones and rocks			Structure			Consis-tence	Calca-reous	Gley-ing	SPL	Notes
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Deve-lop-ment	Ped size					
130	no	n/a	n/a	n/a	0	no	0	0	n/a	AB	M	VC	EXFIR	no	YES	YES	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	NO	-
132	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	20	no	10	0	SS	SAB	W	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	-
133	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	-
134	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	PR	W	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	-
135	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	20	no	0	0	n/a	PR	W	VC	EXFIR	no	NO	YES	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES	-
136	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	20	no	0	0	n/a	PR	W	VC	EXFIR	no	NO	YES	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES	-
137	no	n/a	n/a	n/a	0	yes	5	0	SS	AB	M	C	VFIR	no	NO	NO	
	no	n/a	n/a	n/a	0	no	5	0	SS	GR	W	F	VFR	no	YES	NO	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES	-
138	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	-
139	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	-
140	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	-
142	no	n/a	n/a	n/a	0	yes	0	0	n/a	SAB	0	F	EXFIR	no	NO	NO	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	M	M	FIR	no	YES	YES	
	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	VC	EXFIR	no	NO	YES	-
143	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	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	NO	YES	Slightly sloping
144	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	-
145	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	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	NO	YES	100% mottling in 3rd horizon
145	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	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	NO	YES	100% mottling in 3rd horizon
146	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	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	NO	YES	-
147	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	2	no	0	0	n/a	SAB	M	C	FIR	no	YES	NO	
	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	W	VC	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**	**Droughti-ness**	**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 Droughti-ness
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	Grad-ient	Soil distur-bed or resto-red	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)	Abundan-ce up to %	Hue	Value	Chroma
				4														
				5														
				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
148	**Core**	0	no	3	120	MCL	10YR	6	1	n/a	n/a	n/a	n/a	n/a	100	10YR	5	8
				4														
				5														
				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
149	**Core**	1	no	3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
				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
150	**Core**	1	no	3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
				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
151	**Core**	1	no	3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
				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
152	**Core**	2	no	3	120	C	7.5YR	6	2	n/a	n/a	n/a	n/a	n/a	100	7.5YR	5	8
				4														
				5														
				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
153	**Pit**	2	no	3	100	C	7.5YR	6	2	n/a	n/a	n/a	n/a	n/a	100	7.5YR	5	8
				4														
				5														
				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
154	**Core**	1	no	3	120	HCL	5Y	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	8
				4														
				5														
				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
155	**Core**	2	no	3	120	HCL	5Y	6	2	n/a	n/a	n/a	n/a	n/a	40	10YR	6	8
				4														
				5														
				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
156	**Core**	2	no	3	120	HCL	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
				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
157	**Core**	1	no	3	120	HCL	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
				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
158	**Pit**	0	no	3	100	C	2.5Y	5	3	n/a	n/a	n/a	n/a	n/a	20	10YR	5	6
				4														
				5														
				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
159	**Core**	1	no	3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	100	10YR	4	6
				4														
				5														
				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
160	**Core**	1	no	3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
				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
161	**Core**	1	no	3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
				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
162	**Core**	1	no	3	120	C	10YR	7	1	n/a	n/a	n/a	n/a	n/a	40	10YR	4	6
				4														
				5														
				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
164	**Core**	1	no	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 %	Biopo-res	Stones and rocks			Structure			Consis-tence	Calca-reous	Gley-ing	SPL	Notes
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Deve-lop-ment	Ped size					
	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	
148	no	n/a	n/a	n/a	20	no	0	0	n/a	PR	W	VC	FIR	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	SAB	S	C	FIR	no	YES	NO	
149	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES	less grey coulor
	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	
150	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	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	SAB	S	C	FIR	no	YES	NO	
151	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES	-
	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	SAB	M	M	FIR	no	NO	NO	
152	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	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	
153	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	W	VC	VFIR	no	YES	NO	-
	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	
154	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	M	EXFIR	no	YES	YES	-
	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	
155	no	n/a	n/a	n/a	0	no	0	0	n/a	PR	S	M	EXFIR	no	YES	YES	-
	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	
156	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	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	
157	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	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	
158	no	n/a	n/a	n/a	0	no	0	0	n/a	SAB	W	C	FIR	no	YES	YES	-
	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	SAB	S	VC	EXFIR	no	YES	NO	
159	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES	abrupt 3 horizon groundwater gley
	no	n/a	n/a	n/a	0	yes	0	0	n/a	AB	M	C	VFIR	no	NO	NO	
	no	n/a	n/a	n/a	2	no	0	0	n/a	SAB	S	VC	EXFIR	no	YES	NO	
160	no	n/a	n/a	n/a	2	no	0	0	n/a	PR	S	VC	EXFIR	yes	YES	YES	poorer structure bare patch in field
	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	
161	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	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	SAB	S	C	FIR	no	YES	NO	
162	no	n/a	n/a	n/a	40	no	0	0	n/a	PR	S	VC	EXFIR	no	YES	YES	fe abundant in 3
	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	
164	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**	**Droughti-ness**	**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 Droughti-ness
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	Grad-ient	Soil distur-bed or resto-red	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)	Abundan-ce 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 %	Biopo-res	Stones and rocks			Structure			Consis-tence	Calca-reous	Gley-ing	SPL	Notes
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Deve-lop-ment	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	
	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	stony subsoil
167	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	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	More brown grey in 3rd
168	no	n/a	n/a	n/a	2	yes	0	0	n/a	AB	M	C	EXFIR	no	NO	NO	
	no	n/a	n/a	n/a	20	no	0	0	n/a	PR	M	C	EXFIR	no	YES	YES	soft rush and poorer structure 3rd horizon brownish grey
	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	

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**	**Droughti-ness**	**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	Grad-ient	Soil distur-bed or resto-red	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)	Abundan-ce up to %	Hue	Value	Chroma
192	**Core**	1	no	3	120	C	10YR	6	1	n/a	n/a	n/a	n/a	n/a	40	10YR	6	6
				4														
				5														
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 %	Biopo-res	Stones and rocks			Structure			Consis-tence	Calca-reous	Gley-ing	SPL	Notes
	Colour different to matrix	Hue	Value	Chroma			> 2 cm up to %	> 6 cm up to %	Type	Type	Deve-lop-ment	Ped size					
192	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	AB	S	C	FIR	no	YES	YES	
193	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	
194	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	
195	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	
196	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	AB	S	C	FIR	no	YES	YES	
197	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**	**Droughti-ness**	**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

** Please see the attached document for the definition of textural classes.

Reported by

Myles Nicholson

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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

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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

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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

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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.

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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																													
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																	Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
1	1	30	MCL	0	GOOD	18				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													
	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	166	48									102	-12	3a
	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													
2	1	33	MCL	0	GOOD	18				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													
	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	166	48									104	-10	3a
	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													
3	1	22	HCL	0	GOOD	18				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													
	2	38	MCL	0	POOR	12	7			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													
	3	60	C	0	GOOD	21	15			TAv	60	120	0	21	100	0	0	0			60	120	10	21	100	0	0	210			
										EAv	60	120	60	15	100	0	0	900	170	52									106	-8	2
	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													
4	1	30	HCL	0	GOOD	18				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													
	2	5	C	0	MODERATE	16	8			TAv	30	35	5	16	100	0	0	80			30	35	5	16	100	0	0	80			
										EAv	30	35	0	8	100	0	0	0													
	3	85	C	0	GOOD	21	15			TAv	35	120	15	21	100	0	0	315			35	120	35	21	100	0	0	735			
										EAv	35	120	70	15	100	0	0	1050	199	80									136	22	1
	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													
5	1	40	MCL	0	GOOD	18				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													
	2	25	MCL	0	POOR	12	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													
	3	55	C	0	MODERATE	16	8			TAv	65	120	0	16	100	0	0	0			65	120	5	16	100	0	0	80			
										EAv	65	120	55	8	100	0	0	440	139	20									110	-4	2
	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													
6	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	40	HCL	0	POOR	12	7			TAv	25	65	25	12	100	0	0	300			25	65	40	12	100	0	0	480			
										EAv	25	65	15	7	100	0	0	105													
	3	55	C	0	POOR	13	7			TAv	65	120	0	13	100	0	0	0			65	120	5	13	100	0	0	65			
										EAv	65	120	55	7	100	0	0	385	124	6									100	-14	3a
	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													
7	1	34	HCL	0	GOOD	18				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													
	2	38	HCL	0	POOR	12	7			TAv	34	72	16	12	100	0	0	192			34	72	36	12	100	0	0	432			
										EAv	34	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	129	11									104	-9	2
	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
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			
										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													
9	1	23	HCL	0	GOOD	18				TAv	0	23	23	18	100	0	0	414	155	37	0	23	23	18	100	0	0	414	116	2	2
										EAv	0	23	0	0	100	0	0	0													
	2	39	HCL	0	MODERATE	16	10			TAv	23	62	27	16	100	0	0	432			23	62	39	16	100	0	0	624			
										EAv	23	62	12	10	100	0	0	120													
	3	58	SCL	0	MODERATE	15	10			TAv	62	120	0	15	100	0	0	0			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			
										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													
10	1	26	HCL	0	GOOD	18				TAv	0	26	26	18	100	0	0	468	125	7	0	26	26	18	100	0	0	468	100	-14	3a
										EAv	0	26	0	0	100	0	0	0													
	2	37	HCL	0	POOR	12	7			TAv	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			
										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													
11	1	40	HCL	0	GOOD	18				TAv	0	40	40	18	100	0	0	720	133	15	0	40	40	18	100	0	0	720	108	-6	2
										EAv	0	40	0	0	100	0	0	0													
	2	42	HCL	0	POOR	12	7			TAv	40	82	10	12	100	0	0	120			40	82	30	12	100	0	0	360			
										EAv	40	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			
										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													
12	1	41	HCL	0	GOOD	18				TAv	0	41	41	18	100	0	0	738	134	16	0	41	41	18	100	0	0	738	109	-5	2
										EAv	0	41	0	0	100	0	0	0													
	2	44	HCL	0	POOR	12	7			TAv	41	85	9	12	100	0	0	108			41	85	29	12	100	0	0	348			
										EAv	41	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			
										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													
14	1	35	HCL	0	GOOD	18				TAv	0	35	35	18	100	0	0	630	137	19	0	35	35	18	100	0	0	630	119	5	2
										EAv	0	35	0	0	100	0	0	0													
	2	25	MCL	0	MODERATE	16	10			TAv	35	60	15	16	100	0	0	240			35	60	25	16	100	0	0	400			
										EAv	35	60	10	10	100	0	0	100													
	3	40	HCL	0	MODERATE	16	10			TAv	60	100	0	16	100	0	0	0			60	100	10	16	100	0	0	160			
										EAv	60	100	40	10	100	0	0	400													
	4									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													
	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													
15	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			
										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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
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			
										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												
17	1	28	HCL	5	GOOD	18		1.0	0.5	TAv	0	28	28	18	95	1	5	480	144	25	0	28	28	18	95	1	5	480	104	-10	3a
										EAv	0	28	0	0	95	1	5	0												
	2	25	HCL	0	POOR	12	7			TAv	28	53	22	12	100	0	0	264			28	53	25	12	100	0	0	300			
										EAv	28	53	3	7	100	0	0	21												
	3	67	SCL	0	MODERATE	15	10			TAv	53	120	0	15	100	0	0	0			53	120	17	15	100	0	0	255			
										EAv	53	120	67	10	100	0	0	670												
	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												
18	1	40	C	0	GOOD	17				TAv	0	40	40	17	100	0	0	680	129	11	0	40	40	17	100	0	0	680	104	-10	2
										EAv	0	40	0	0	100	0	0	0												
	2	41	HCL	0	POOR	12	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												
	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			
										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												
19	1	33	HCL	0	GOOD	18				TAv	0	33	33	18	100	0	0	594	143	25	0	33	33	18	100	0	0	594	122	8	2
										EAv	0	33	0	0	100	0	0	0												
	2	36	HZCL	0	MODERATE	17	10			TAv	33	69	17	17	100	0	0	289			33	69	36	17	100	0	0	612			
										EAv	33	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			
										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												
20	1	30	MCL	0	GOOD	18				TAv	0	30	30	18	100	0	0	540	139	20	0	30	30	18	100	0	0	540	116	2	2
										EAv	0	30	0	0	100	0	0	0												
	2	25	HZCL	0	MODERATE	17	10			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												
	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												
	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												
21	1	27	HCL	0	GOOD	18				TAv	0	27	27	18	100	0	0	486	137	19	0	27	27	18	100	0	0	486	114	0	2
										EAv	0	27	0	0	100	0	0	0												
	2	23	HZCL	0	MODERATE	17	10			TAv	27	50	23	17	100	0	0	391			27	50	23	17	100	0	0	391			
										EAv	27	50	0	10	100	0	0	0												
	3	70	C	0	POOR	13	7			TAv	50	120	0	13	100	0	0	0			50	120	20	13	100	0	0	260			
										EAv	50	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			
										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												
22	1	25	HCL	0	GOOD	18				TAv	0	25	25	18	100	0	0	450	135	17	0	25	25	18	100	0	0	450	112	-2	2
										EAv	0	25	0	0	100	0	0	0												
	2	27	HCL	0	MODERATE	16	10			TAv	25	52	25	16	100	0	0	400			25	52	27	16	100	0	0	432			
										EAv	25	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			
										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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	Limited to ALC grade							
23	1	35	HCL	0	GOOD	18				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																			
	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	130	12								105	-9	2							
	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																			
24	1	33	HCL	0	GOOD	18				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																			
	2	37	HCL	0	POOR	12	7			TAv	33	70	17	12	100	0	0	204			33	70	37	12	100	0	0	444										
										EAv	33	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	129	11								104	-10	3a							
	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																			
25	1	29	HCL	0	GOOD	18				TAv	0	29	29	18	100	0	0	522			0	29	29	18	100	0	0	522										
										EAv	0	29	0	0	100	0	0	0																			
	2	23	HCL	0	MODERATE	16	10			TAv	29	52	21	16	100	0	0	336			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	131	13								116	2	2							
	4									TAv	95	95	0	0	100	0	0	0			95	95	0	0	100	0	0	0										
										EAv	95	95	0	0	100	0	0	0																			
	5									TAv	95	95	0	0	100	0	0	0			95	95	0	0	100	0	0	0										
										EAv	95	95	0	0	100	0	0	0																			
26	1	36	HCL	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	33	HCL	0	POOR	12	7			TAv	36	69	14	12	100	0	0	168			36	69	33	12	100	0	0	396										
										EAv	36	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	131	13								106	-8	2							
	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																			
27	1	37	HCL	0	GOOD	18				TAv	0	37	37	18	100	0	0	666			0	37	37	18	100	0	0	666										
										EAv	0	37	0	0	100	0	0	0																			
	2	20	HCL	0	POOR	12	7			TAv	37	57	13	12	100	0	0	156			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	131	13								108	-6	2							
	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																			
28	1	27	HCL	0	GOOD	18				TAv	0	27	27	18	100	0	0	486			0	27	27	18	100	0	0	486										
										EAv	0	27	0	0	100	0	0	0																			
	2	22	HCL	0	MODERATE	16	10			TAv	27	49	22	16	100	0	0	352			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	134	16								111	-3	2							
	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																			
29	1	26	HCL	0	GOOD	18				TAv	0	26	26	18	100	0	0	468			0	26	26	18	100	0	0	468										
										EAv	0	26	0	0	100	0	0	0																			
	2	25	HCL	0	MODERATE	16	10			TAv	26	51	24	16	100	0	0	384			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	135	16								112	-2	2							
	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
30	1	40	MCL	0	GOOD	18				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													
	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	149	31								126	12	1
	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													
31	1	39	MCL	0	GOOD	18				TAv	0	39	39	18	100	0	0	702			0	39	39	18	100	0	0	702			
										EAv	0	39	0	0	100	0	0	0													
	2	32	HCL	5	POOR	12	7	3.0	2.0	TAv	39	71	11	12	95	3	5	127			39	71	31	12	95	3	5	358			
										EAv	39	71	21	7	95	2	5	142													
	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	146	28								106	-8	2
	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													
32	1	36	MCL	10	GOOD	18		3.0	2.0	TAv	0	36	36	18	90	3	10	594			0	36	36	18	90	3	10	594			
										EAv	0	36	0	0	90	2	10	0													
	2	38	HCL	15	POOR	12	7	3.0	2.0	TAv	36	74	14	12	85	3	15	149			36	74	34	12	85	3	15	362			
										EAv	36	74	24	7	85	2	15	150													
	3	46	HCL	0	MODERATE	16	10			TAv	74	120	0	16	100	0	0	0			74	120	0	16	100	0	0	0			
										EAv	74	120	46	10	100	0	0	460	135	17								96	-18	3a
	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													
33	1	37	MCL	10	GOOD	18		3.0	2.0	TAv	0	37	37	18	90	3	10	611			0	37	37	18	90	3	10	611			
										EAv	0	37	0	0	90	2	10	0													
	2	38	HCL	10	POOR	12	7	3.0	2.0	TAv	37	75	13	12	90	3	10	144			37	75	33	12	90	3	10	366			
										EAv	37	75	25	7	90	2	10	163													
	3	45	HCL	0	MODERATE	16	10			TAv	75	120	0	16	100	0	0	0			75	120	0	16	100	0	0	0			
										EAv	75	120	45	10	100	0	0	450	137	19								98	-16	3a
	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													
34	1	35	MCL	0	GOOD	18				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													
	2	36	MCL	5	POOR	12	7	3.0	2.0	TAv	35	71	15	12	95	3	5	173			35	71	35	12	95	3	5	404			
										EAv	35	71	21	7	95	2	5	142													
	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	144	25								103	-10	3a
	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													
35	1	32	MCL	0	GOOD	18				TAv	0	32	32	18	100	0	0	576			0	32	32	18	100	0	0	576			
										EAv	0	32	0	0	100	0	0	0													
	2	40	MCL	0	POOR	12	7			TAv	32	72	18	12	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	143	25								103	-11	3a
	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													
36	1	36	HCL	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	42	C	0	POOR	13	7			TAv	36	78	14	13	100	0	0	182			36	78	34	13	100	0	0	442			
										EAv	36	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	132	14								109	-5	2
	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
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			
										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													
38	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	18	HCL	0	POOR	12	7			TAv	38	56	12	12	100	0	0	144			38	56	18	12	100	0	0	216			
										EAv	38	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													
	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													
39	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	20	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													
	3	65	HCL	0	POOR	12	7			TAv	55	120	0	12	100	0	0	0			55	120	15	12	100	0	0	180			
										EAv	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			
										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													
40	1	22	HCL	0	GOOD	18				TAv	0	22	22	18	100	0	0	396	125	7	0	22	22	18	100	0	0	396	101	-13	3a
										EAv	0	22	0	0	100	0	0	0													
	2	33	C	0	POOR	13	7			TAv	22	55	28	13	100	0	0	364			22	55	33	13	100	0	0	429			
										EAv	22	55	5	7	100	0	0	35													
	3	65	HCL	0	POOR	12	7			TAv	55	120	0	12	100	0	0	0			55	120	15	12	100	0	0	180			
										EAv	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			
										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													
41	1	23	HCL	0	GOOD	18				TAv	0	23	23	18	100	0	0	414	126	7	0	23	23	18	100	0	0	414	101	-13	3a
										EAv	0	23	0	0	100	0	0	0													
	2	28	C	0	POOR	13	7			TAv	23	51	27	13	100	0	0	351			23	51	28	13	100	0	0	364			
										EAv	23	51	1	7	100	0	0	7													
	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													
	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													
42	1	39	HCL	5	GOOD	18		3.0	2.0	TAv	0	39	39	18	95	3	5	673	141	23	0	39	39	18	95	3	5	673	103	-11	3a
										EAv	0	39	0	0	95	2	5	0													
	2	34	C	15	POOR	13	7	3.0	2.0	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													
	3	47	HCL	0	MODERATE	16	10			TAv	73	120	0	16	100	0	0	0			73	120	0	16	100	0	0	0			
										EAv	73	120	47	10	100	0	0	470													
	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													
43	1	29	HCL	5	GOOD	18		3.0	2.0	TAv	0	29	29	18	95	3	5	500	123	5	0	29	29	18	95	3	5	500	97	-16	3a
										EAv	0	29	0	0	95	2	5	0													
	2	40	HCL	5	POOR	12	7	3.0	2.0	TAv	29	69	21	12	95	3	5	243			29	69	40	12	95	3	5	462			
										EAv	29	69	19	7	95	2	5	128													
	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			
										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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
44	1	32	MCL	0	GOOD	18				TAv	0	32	32	18	100	0	0	576			0	32	32	18	100	0	0	576			
										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	128	10									103	-11	3a
	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													
45	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	131	13									106	-8	2
	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													
46	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	124	6									99	-15	3a
	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													
47	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	139	21									116	2	2
	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													
48	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	144	26									121	7	2
	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													
49	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	144	26									118	4	2
	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													
50	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	147	29									120	6	2
	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																											
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes															Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
51	1	31	HCL	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	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	136	17	51	120	19	12	100	0	0	228	111	-3	2
										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													
	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													
52	1	35	HCL	0	GOOD	18				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													
	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	130	12	75	120	0	12	100	0	0	0	105	-9	2
										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													
	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													
53	1	37	HCL	0	GOOD	18				TAv	0	37	37	18	100	0	0	666			0	37	37	18	100	0	0	666			
										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	131	13	78	120	0	12	100	0	0	0	106	-8	2
										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													
	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													
54	1	36	HCL	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	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	131	13	59	120	11	12	100	0	0	132	106	-8	2
										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													
	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													
55	1	28	HCL	0	GOOD	18				TAv	0	28	28	18	100	0	0	504			0	28	28	18	100	0	0	504			
										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	126	8	75	120	0	12	100	0	0	0	101	-13	3a
										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													
	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													
56	1	38	C	5	GOOD	17		3.0	2.0	TAv	0	38	38	17	95	3	5	619			0	38	38	17	95	3	5	619			
										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	134	15	75	120	0	16	95	3	5	0	96	-18	3a
										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													
	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													
57	1	39	C	5	GOOD	17		3.0	2.0	TAv	0	39	39	17	95	3	5	636			0	39	39	17	95	3	5	636			
										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	135	17	77	120	0	16	100	0	0	0	97	-17	3a
										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													
	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
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			
										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													
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			
										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													
60	1	38	MCL	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	22	HCL	0	POOR	12	7			TAv	38	60	12	12	100	0	0	144			38	60	22	12	100	0	0	264			
										EAv	38	60	10	7	100	0	0	70													
	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			
										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													
61	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	31	HCL	0	POOR	12	7			TAv	32	63	18	12	100	0	0	216			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			
										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													
62	1	25	MCL	0	GOOD	18				TAv	0	25	25	18	100	0	0	450	120	2	0	25	25	18	100	0	0	450	94	-20	3a
										EAv	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			
										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													
63	1	29	MCL	0	GOOD	18				TAv	0	29	29	18	100	0	0	522	126	8	0	29	29	18	100	0	0	522	101	-12	3a
										EAv	0	29	0	0	100	0	0	0													
	2	66	HCL	0	POOR	12	7			TAv	29	95	21	12	100	0	0	252			29	95	41	12	100	0	0	492			
										EAv	29	95	45	7	100	0	0	315													
	3	25	HCL	0	POOR	12	7			TAv	95	120	0	12	100	0	0	0			95	120	0	12	100	0	0	0			
										EAv	95	120	25	7	100	0	0	175													
	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													
64	1	34	MCL	0	GOOD	18				TAv	0	34	34	18	100	0	0	612	157	39	0	34	34	18	100	0	0	612	136	22	1
										EAv	0	34	0	0	100	0	0	0													
	2	35	HCL	0	GOOD	21	14			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													
	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			
										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																																
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																				
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	Limited to ALC grade
65	1	40	MCL	0	GOOD	18				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												
	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	143	25								120	6	2
	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												
66	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	33	HCL	0	MODERATE	16	10			TAv	42	75	8	16	100	0	0	128			42	75	28	16	100	0	0	448			
										EAv	42	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	145	27								120	7	2
	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												
67	1	41	MCL	0	GOOD	18				TAv	0	41	41	18	100	0	0	738			0	41	41	18	100	0	0	738			
										EAv	0	41	0	0	100	0	0	0												
	2	34	HCL	0	MODERATE	16	10			TAv	41	75	9	16	100	0	0	144			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	145	27								120	6	2
	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												
68	1	33	HCL	0	GOOD	18				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												
	2	21	HCL	0	MODERATE	16	10			TAv	33	54	17	16	100	0	0	272			33	54	21	16	100	0	0	336			
										EAv	33	54	4	10	100	0	0	40												
	3	66	C	0	POOR	13	7			TAv	54	120	0	13	100	0	0	0			54	120	16	13	100	0	0	208			
										EAv	54	120	66	7	100	0	0	462	137	19								114	0	2
	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												
69	1	32	HCL	0	GOOD	18				TAv	0	32	32	18	100	0	0	576			0	32	32	18	100	0	0	576			
										EAv	0	32	0	0	100	0	0	0												
	2	20	HCL	0	MODERATE	16	10			TAv	32	52	18	16	100	0	0	288			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	136	18								113	-1	2
	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												
70	1	30	HCL	0	GOOD	18				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												
	2	23	HCL	0	MODERATE	16	10			TAv	30	53	20	16	100	0	0	320			30	53	23	16	100	0	0	368			
										EAv	30	53	3	10	100	0	0	30												
	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	136	18								113	-1	2
	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												
71	1	33	HCL	0	GOOD	18				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												
	2	22	C	0	POOR	13	7			TAv	33	55	17	13	100	0	0	221			33	55	22	13	100	0	0	286			
										EAv	33	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	131	12								108	-6	2
	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	Limited to ALC grade							
72	1	35	HCL	0	GOOD	18				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																				
	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	132	13	75	120	0	13	100	0	0	0	109	-5	2								
										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																				
	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																				
73	1	38	HCL	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	13	HCL	0	MODERATE	16	10			TAv	38	51	12	16	100	0	0	192			38	51	13	16	100	0	0	208											
										EAv	38	51	1	10	100	0	0	10																				
	3	69	C	0	POOR	13	7			TAv	51	120	0	13	100	0	0	0	137	19	51	120	19	13	100	0	0	247	114	0	2								
										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																				
	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																				
74	1	31	HCL	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	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	136	18	58	120	12	12	100	0	0	144	113	0	2								
										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											
										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																				
75	1	30	SCL	10	GOOD	17		10.0	7.0	TAv	0	30	30	17	90	10	10	489			0	30	30	17	90	10	10	489											
										EAv	0	30	0	0	90	7	10	0																				
	2	30	SCL	55	MODERATE	15	10	10.0	7.0	TAv	30	60	20	15	45	10	55	245			30	60	30	15	45	10	55	368											
										EAv	30	60	10	10	45	7	55	84																				
	3	60	HCL	0	POOR	12	7			TAv	60	120	0	12	100	0	0	0	124	6	60	120	10	12	100	0	0	120	98	-16	3a								
										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											
										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																				
76	1	38	SCL	10	GOOD	17		3.0	2.0	TAv	0	38	38	17	90	3	10	593			0	38	38	17	90	3	10	593											
										EAv	0	38	0	0	90	2	10	0																				
	2	37	SCL	15	MODERATE	15	10	10.0	7.0	TAv	38	75	12	15	85	10	15	171			38	75	32	15	85	10	15	456											
										EAv	38	75	25	10	85	7	15	239																				
	3	45	HCL	0	POOR	12	7			TAv	75	120	0	12	100	0	0	0	132	14	75	120	0	12	100	0	0	0	105	-9	2								
										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																				
	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																				
77	1	36	MCL	5	GOOD	18		3.0	2.0	TAv	0	36	36	18	95	3	5	621			0	36	36	18	95	3	5	621											
										EAv	0	36	0	0	95	2	5	0																				
	2	33	MCL	0	MODERATE	16	10			TAv	36	69	14	16	100	0	0	224			36	69	33	16	100	0	0	528											
										EAv	36	69	19	10	100	0	0	190																				
	3	51	HCL	0	POOR	12	7			TAv	69	120	0	12	100	0	0	0	139	21	69	120	1	12	100	0	0	12	116	2	2								
										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											
										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																				
78	1	30	MCL	10	GOOD	18		3.0	2.0	TAv	0	30	30	18	90	3	10	495			0	30	30	18	90	3	10	495											
										EAv	0	30	0	0	90	2	10	0																				
	2	30	C	10	GOOD	21	15	3.0	2.0	TAv	30	60	20	21	90	3	10	384			30	60	30	21	90	3	10	576											
										EAv	30	60	10	15	90	2	10	137																				
	3	40	C	0	MODERATE	16	8			TAv	60	100	0	16	100	0	0	0	134	16	60	100	10	16	100	0	0	160	123	9	2								
										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											
										EAv	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
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			
										EAv	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													
80	1	31	MCL	0	GOOD	18				TAv	0	31	31	18	100	0	0	558	156	38	0	31	31	18	100	0	0	558	118	4	2
										EAv	0	31	0	0	100	0	0	0													
	2	40	MCL	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													
	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			
										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													
81	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			
										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													
82	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			
										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													
83	1	35	MCL	0	GOOD	18				TAv	0	35	35	18	100	0	0	630	143	25	0	35	35	18	100	0	0	630	119	5	2
										EAv	0	35	0	0	100	0	0	0													
	2	37	MCL	0	MODERATE	16	10			TAv	35	72	15	16	100	0	0	240			35	72	35	16	100	0	0	560			
										EAv	35	72	22	10	100	0	0	220													
	3	48	HCL	0	POOR	12	7			TAv	72	120	0	12	100	0	0	0			72	120	0	12	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													
	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													
84	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			
										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													
85	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			
										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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	Limited to ALC grade							
86	1	30	MCL	0	GOOD	18				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																				
	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	141	23	69	120	1	12	100	0	0	12	118	4	2								
										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											
										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																				
87	1	33	HCL	0	GOOD	18				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																				
	2	22	C	0	MODERATE	16	8			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																				
	3	65	C	0	POOR	13	7			TAv	55	120	0	13	100	0	0	0	136	18	55	120	15	13	100	0	0	195	114	0	2								
										EAv	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											
										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																				
88	1	30	HCL	0	GOOD	18				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																				
	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	135	17	53	120	17	13	100	0	0	221	113	-1	2								
										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											
										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																				
89	1	36	HCL	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	20	C	0	POOR	13	7			TAv	36	56	14	13	100	0	0	182			36	56	20	13	100	0	0	260											
										EAv	36	56	6	7	100	0	0	42																				
	3	64	C	0	POOR	13	7			TAv	56	120	0	13	100	0	0	0	132	14	56	120	14	13	100	0	0	182	109	-5	2								
										EAv	56	120	64	7	100	0	0	448																				
	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																				
90	1	25	C	0	GOOD	17				TAv	0	25	25	17	100	0	0	425			0	25	25	17	100	0	0	425											
										EAv	0	25	0	0	100	0	0	0																				
	2	28	C	0	POOR	13	7			TAv	25	53	25	13	100	0	0	325			25	53	28	13	100	0	0	364											
										EAv	25	53	3	7	100	0	0	21																				
	3	67	C	0	POOR	13	7			TAv	53	120	0	13	100	0	0	0	124	6	53	120	17	13	100	0	0	221	101	-13	3a								
										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											
										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																				
91	1	25	C	0	GOOD	17				TAv	0	25	25	17	100	0	0	425			0	25	25	17	100	0	0	425											
										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	124	6	57	120	13	13	100	0	0	169	101	-13	3a								
										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											
										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																				
92	1	33	HCL	0	GOOD	18				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																				
	2	44	C	0	POOR	13	7			TAv	33	77	17	13	100	0	0	221			33	77	37	13	100	0	0	481											
										EAv	33	77	27	7	100	0	0	189																				
	3	43	C	0	POOR	13	7			TAv	77	120	0	13	100	0	0	0	131	12	77	120	0	13	100	0	0	0	108	-6	2								
										EAv	77	120	43	7	100	0	0	301																				
	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																																
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																				
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	Limited to ALC grade
93	1	40	HCL	0	GOOD	18				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													
	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	137	19	51	120	19	13	100	0	0	247	114	0	2
										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													
	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													
93.1	1	26	HCL	0	GOOD	18				TAv	0	26	26	18	100	0	0	468			0	26	26	18	100	0	0	468			
										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	133	15	45	120	25	13	100	0	0	325	110	-4	2
										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			
										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													
94	1	30	HCL	0	GOOD	18				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													
	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	HCL	0	POOR	12	7			TAv	59	120	0	12	100	0	0	0	136	18	59	120	11	12	100	0	0	132	114	0	2
										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													
	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													
95	1	39	C	10	GOOD	17		3.0	2.0	TAv	0	39	39	17	90	3	10	608			0	39	39	17	90	3	10	608			
										EAv	0	39	0	0	90	2	10	0													
	2	34	C	15	POOR	13	7	3.0	2.0	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													
	3	47	HCL	0	POOR	12	7			TAv	73	120	0	12	100	0	0	0	121	3	73	120	0	12	100	0	0	0	96	-17	3a
										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			
										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													
96	1	30	MCL	15	GOOD	18		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													
	2	43	MCL	10	POOR	12	7	3.0	2.0	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													
	3	47	HCL	0	POOR	12	7			TAv	73	120	0	12	100	0	0	0	117	-1	73	120	0	12	100	0	0	0	92	-22	3a
										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			
										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													
97	1	38	MCL	15	GOOD	18		3.0	2.0	TAv	0	38	38	18	85	3	15	599			0	38	38	18	85	3	15	599			
										EAv	0	38	0	0	85	2	15	0													
	2	33	MCL	10	POOR	12	7	3.0	2.0	TAv	38	71	12	12	90	3	10	133			38	71	32	12	90	3	10	355			
										EAv	38	71	21	7	90	2	10	137													
	3	49	HCL	0	POOR	12	7			TAv	71	120	0	12	100	0	0	0	121	3	71	120	0	12	100	0	0	0	95	-18	3a
										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													
	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													
98	1	41	MCL	5	GOOD	18		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													
	2	27	MCL	10	POOR	12	7	3.0	2.0	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													
	3	52	HCL	0	POOR	12	7			TAv	68	120	0	12	100	0	0	0	129	11	68	120	2	12	100	0	0	24	103	-11	3a
										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													
	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
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			
										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													
100	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			
										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													
101	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			
										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													
102	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			
										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													
103	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			
										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													
104	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			
										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													
105	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	Limited to ALC grade							
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																			
	2	22	HZCL	0	MODERATE	17	10			TAv	26	48	22	17	100	0	0	374			26	48	22	17	100	0	0	374											
										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			48	120	22	21	100	0	0	462											
										EAv	48	120	70	12	100	0	0	840																			
	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																			
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																			
	2	18	C	0	MODERATE	16	8			TAv	27	45	18	16	100	0	0	288			27	45	18	16	100	0	0	288											
										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			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																			
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																			
	2	26	C	0	POOR	13	7			TAv	29	55	21	13	100	0	0	273			29	55	26	13	100	0	0	338											
										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			55	120	15	21	100	0	0	315											
										EAv	55	120	65	14	100	0	0	910																			
	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																			
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																			
	2	22	C	0	POOR	13	7			TAv	32	54	18	13	100	0	0	234			32	54	22	13	100	0	0	286											
										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			54	120	16	13	100	0	0	208											
										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											
										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																			
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																			
	2	24	C	0	MODERATE	16	8			TAv	28	52	22	16	100	0	0	352			28	52	24	16	100	0	0	384											
										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			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											
										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																			
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																			
	2	29	C	0	POOR	13	7			TAv	24	53	26	13	100	0	0	338			24	53	29	13	100	0	0	377											
										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			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											
										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																			
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																			
	2	26	C	0	POOR	13	7			TAv	26	52	24	13	100	0	0	312			26	52	26	13	100	0	0	338											
										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			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											
										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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	Limited to ALC grade
113	1	36	HCL	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	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	137	19	52	120	18	13	100	0	0	234	114	0	2
										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			
										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													
114	1	35	MCL	5	GOOD	18		3.0	2.0	TAv	0	35	35	18	95	3	5	604			0	35	35	18	95	3	5	604			
										EAv	0	35	0	0	95	2	5	0													
	2	50	MCL	0	MODERATE	16	10			TAv	35	85	15	16	100	0	0	240			35	85	35	16	100	0	0	560			
										EAv	35	85	35	10	100	0	0	350													
	3	35	HCL	0	POOR	12	7			TAv	85	120	0	12	100	0	0	0	144	26	85	120	0	12	100	0	0	0	116	3	2
										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			
										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													
115	1	32	MCL	5	GOOD	18		3.0	2.0	TAv	0	32	32	18	95	3	5	552			0	32	32	18	95	3	5	552			
										EAv	0	32	0	0	95	2	5	0													
	2	43	MCL	0	MODERATE	16	10			TAv	32	75	18	16	100	0	0	288			32	75	38	16	100	0	0	608			
										EAv	32	75	25	10	100	0	0	250													
	3	45	HCL	0	POOR	12	7			TAv	75	120	0	12	100	0	0	0	141	22	75	120	0	12	100	0	0	0	116	2	2
										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													
	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													
116	1	34	MCL	5	GOOD	18		3.0	2.0	TAv	0	34	34	18	95	3	5	587			0	34	34	18	95	3	5	587			
										EAv	0	34	0	0	95	2	5	0													
	2	28	MCL	0	MODERATE	16	10			TAv	34	62	16	16	100	0	0	256			34	62	28	16	100	0	0	448			
										EAv	34	62	12	10	100	0	0	120													
	3	58	HCL	0	POOR	12	7			TAv	62	120	0	12	100	0	0	0	137	19	62	120	8	12	100	0	0	96	113	-1	2
										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			
										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													
117	1	33	MCL	0	GOOD	18				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													
	2	35	MCL	0	MODERATE	16	10			TAv	33	68	17	16	100	0	0	272			33	68	35	16	100	0	0	560			
										EAv	33	68	18	10	100	0	0	180													
	3	52	HCL	0	POOR	12	7			TAv	68	120	0	12	100	0	0	0	141	23	68	120	2	12	100	0	0	24	118	4	2
										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													
	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													
118	1	41	C	0	GOOD	17				TAv	0	41	41	17	100	0	0	697			0	41	41	17	100	0	0	697			
										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	130	12	81	120	0	13	100	0	0	0	107	-6	2
										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			
										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													
119	1	41	C	0	GOOD	17				TAv	0	41	41	17	100	0	0	697			0	41	41	17	100	0	0	697			
										EAv	0	41	0	0	100	0	0	0													
	2	43	C	0	POOR	13	7			TAv	41	84	9	13	100	0	0	117			41	84	29	13	100	0	0	377			
										EAv	41	84	34	7	100	0	0	238													
	3	36	C	0	POOR	13	7			TAv	84	120	0	13	100	0	0	0	130	12	84	120	0	13	100	0	0	0	107	-6	2
										EAv	84	120	36	7	100	0	0	252													
	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(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			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	132	14	83	120	0	13	100	0	0	0	109	-5	2
										EAv	83	120	37	7	100	0	0	259													
	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													
121	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													
	2	37	C	0	POOR	13	7			TAv	43	80	7	13	100	0	0	91			43	80	27	13	100	0	0	351			
										EAv	43	80	30	7	100	0	0	210													
	3	40	C	0	POOR	13	7			TAv	80	120	0	13	100	0	0	0	131	13	80	120	0	13	100	0	0	0	108	-6	2
										EAv	80	120	40	7	100	0	0	280													
	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													
121	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													
	2	37	C	0	POOR	13	7			TAv	43	80	7	13	100	0	0	91			43	80	27	13	100	0	0	351			
										EAv	43	80	30	7	100	0	0	210													
	3	40	C	0	POOR	13	7			TAv	80	120	0	13	100	0	0	0	131	13	80	120	0	13	100	0	0	0	108	-6	2
										EAv	80	120	40	7	100	0	0	280													
	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													
122	1	32	MCL	0	GOOD	18				TAv	0	32	32	18	100	0	0	576			0	32	32	18	100	0	0	576			
										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	128	10	56	120	14	12	100	0	0	168	103	-11	3a
										EAv	56	120	64	7	100	0	0	448													
	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													
123	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													
	2	37	C	0	POOR	13	7			TAv	43	80	7	13	100	0	0	91			43	80	27	13	100	0	0	351			
										EAv	43	80	30	7	100	0	0	210													
	3	40	C	0	POOR	13	7			TAv	80	120	0	13	100	0	0	0	131	13	80	120	0	13	100	0	0	0	108	-6	2
										EAv	80	120	40	7	100	0	0	280													
	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													
123	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													
	2	37	C	0	POOR	13	7			TAv	43	80	7	13	100	0	0	91			43	80	27	13	100	0	0	351			
										EAv	43	80	30	7	100	0	0	210													
	3	40	C	0	POOR	13	7			TAv	80	120	0	13	100	0	0	0	131	13	80	120	0	13	100	0	0	0	108	-6	2
										EAv	80	120	40	7	100	0	0	280													
	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													
124	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	128	10	58	120	12	12	100	0	0	144	103	-11	3a
										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			
										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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
125	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	38	MCL	0	POOR	12	7			TAv	32	70	18	12	100	0	0	216			32	70	38	12	100	0	0	456			
										EAv	32	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													
	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													
126	1	31	HCL	0	GOOD	18				TAv	0	31	31	18	100	0	0	558	128	10	0	31	31	18	100	0	0	558	103	-11	3a
										EAv	0	31	0	0	100	0	0	0													
	2	48	MCL	0	POOR	12	7			TAv	31	79	19	12	100	0	0	228			31	79	39	12	100	0	0	468			
										EAv	31	79	29	7	100	0	0	203													
	3	41	HCL	0	POOR	12	7			TAv	79	120	0	12	100	0	0	0			79	120	0	12	100	0	0	0			
										EAv	79	120	41	7	100	0	0	287													
	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													
127	1	22	C	5	GOOD	17		1.0	0.5	TAv	0	22	22	17	95	1	5	356	121	3	0	22	22	17	95	1	5	356	98	-16	3a
										EAv	0	22	0	0	95	1	5	0													
	2	32	C	0	POOR	13	7			TAv	22	54	28	13	100	0	0	364			22	54	32	13	100	0	0	416			
										EAv	22	54	4	7	100	0	0	28													
	3	66	C	0	POOR	13	7			TAv	54	120	0	13	100	0	0	0			54	120	16	13	100	0	0	208			
										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			
										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													
128	1	24	HCL	5	GOOD	18		1.0	0.5	TAv	0	24	24	18	95	1	5	412	124	6	0	24	24	18	95	1	5	412	101	-13	3a
										EAv	0	24	0	0	95	1	5	0													
	2	31	C	0	POOR	13	7			TAv	24	55	26	13	100	0	0	338			24	55	31	13	100	0	0	403			
										EAv	24	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													
	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													
129	1	33	HCL	5	GOOD	18		3.0	2.0	TAv	0	33	33	18	95	3	5	569	126	8	0	33	33	18	95	3	5	569	101	-13	3a
										EAv	0	33	0	0	95	2	5	0													
	2	42	MCL	0	POOR	12	7			TAv	33	75	17	12	100	0	0	204			33	75	37	12	100	0	0	444			
										EAv	33	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			
										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													
130	1	32	MCL	5	GOOD	18		3.0	2.0	TAv	0	32	32	18	95	3	5	552	126	8	0	32	32	18	95	3	5	552	101	-13	3a
										EAv	0	32	0	0	95	2	5	0													
	2	48	MCL	0	POOR	12	7			TAv	32	80	18	12	100	0	0	216			32	80	38	12	100	0	0	456			
										EAv	32	80	30	7	100	0	0	210													
	3	40	C	0	POOR	13	7			TAv	80	120	0	13	100	0	0	0			80	120	0	13	100	0	0	0			
										EAv	80	120	40	7	100	0	0	280													
	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													
132	1	65	HCL	0	GOOD	18				TAv	0	65	50	18	100	0	0	900	128	10	0	65	65	18	100	0	0	1170	123	9	2
										EAv	0	65	15	0	100	0	0	0													
	2	7	C	10	POOR	13	7	3.0	2.0	TAv	65	72	0	13	90	3	10	0			65	72	5	13	90	3	10	60			
										EAv	65	72	7	7	90	2	10	46													
	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													
	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
133	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													
	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	131	13	82	120	0	13	100	0	0	0	108	-6	2
										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			
										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													
134	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	134	16	95	120	0	13	100	0	0	0	109	-5	2
										EAv	95	120	25	7	100	0	0	175													
	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													
135	1	30	MCL	0	GOOD	18				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													
	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	127	9	67	120	3	13	100	0	0	39	102	-12	3a
										EAv	67	120	53	7	100	0	0	371													
	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													
136	1	24	C	0	GOOD	17				TAv	0	24	24	17	100	0	0	408			0	24	24	17	100	0	0	408			
										EAv	0	24	0	0	100	0	0	0													
	2	52	MCL	0	POOR	12	7			TAv	24	76	26	12	100	0	0	312			24	76	46	12	100	0	0	552			
										EAv	24	76	26	7	100	0	0	182													
	3	44	C	0	POOR	13	7			TAv	76	120	0	13	100	0	0	0	121	3	76	120	0	13	100	0	0	0	96	-18	3a
										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			
										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													
137	1	35	MCL	5	GOOD	18		3.0	2.0	TAv	0	35	35	18	95	3	5	604			0	35	35	18	95	3	5	604			
										EAv	0	35	0	0	95	2	5	0													
	2	20	MCL	5	GOOD	21	14	3.0	2.0	TAv	35	55	15	21	95	3	5	302			35	55	20	21	95	3	5	402			
										EAv	35	55	5	14	95	2	5	67													
	3	65	C	0	POOR	13	7			TAv	55	120	0	13	100	0	0	0	143	25	55	120	15	13	100	0	0	195	120	6	2
										EAv	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			
										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													
138	1	45	C	0	GOOD	17				TAv	0	45	45	17	100	0	0	765			0	45	45	17	100	0	0	765			
										EAv	0	45	0	0	100	0	0	0													
	2	37	C	0	POOR	13	7			TAv	45	82	5	13	100	0	0	65			45	82	25	13	100	0	0	325			
										EAv	45	82	32	7	100	0	0	224													
	3	38	C	0	POOR	13	7			TAv	82	120	0	13	100	0	0	0	132	14	82	120	0	13	100	0	0	0	109	-5	2
										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			
										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													
139	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	132	14	83	120	0	13	100	0	0	0	109	-5	2
										EAv	83	120	37	7	100	0	0	259													
	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	Limited to ALC grade							
140	1	41	C	0	GOOD	17				TAv	0	41	41	17	100	0	0	697			0	41	41	17	100	0	0	697															
										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															
										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																						
																			130	12									107	-6	2								
142	1	55	C	0	GOOD	17				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																						
	2	16	C	0	MODERATE	16	8			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																						
	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																						
	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																						
																			132	14									118	4	2								
143	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																						
	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																						
																			167	48									140	26	1								
144	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																						
	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																						
																			133	14									112	-2	2								
145	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																						
	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																						
																			154	36									131	17	1								
145	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																						
	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																						
																			154	36									131	17	1								
146	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																						
	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																						
																			163	45									139	25	1								

Data inputs										Droughtiness calculations																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
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			
										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												
148	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			
										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												
149	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			
										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												
150	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			
										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												
151	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			
										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												
152	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			
										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												
153	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			
										EAv	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																Limited to ALC grade
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	
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			
										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													
155	1	39	MCL	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	30	MCL	0	POOR	12	7			TAv	39	69	11	12	100	0	0	132			39	69	30	12	100	0	0	360			
										EAv	39	69	19	7	100	0	0	133													
	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			
										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													
156	1	23	HCL	0	GOOD	18				TAv	0	23	23	18	100	0	0	414	135	17	0	23	23	18	100	0	0	414	110	-4	2
										EAv	0	23	0	0	100	0	0	0													
	2	31	MCL	0	MODERATE	16	10			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													
	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													
	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													
157	1	22	C	0	GOOD	17				TAv	0	22	22	17	100	0	0	374	132	14	0	22	22	17	100	0	0	374	108	-6	2
										EAv	0	22	0	0	100	0	0	0													
	2	32	MCL	0	MODERATE	16	10			TAv	22	54	28	16	100	0	0	448			22	54	32	16	100	0	0	512			
										EAv	22	54	4	10	100	0	0	40													
	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													
	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													
158	1	35	C	0	GOOD	17				TAv	0	35	35	17	100	0	0	595	133	15	0	35	35	17	100	0	0	595	124	10	2
										EAv	0	35	0	0	100	0	0	0													
	2	20	C	5	GOOD	21	15	1.0	0.5	TAv	35	55	15	21	95	1	5	300			35	55	20	21	95	1	5	400			
										EAv	35	55	5	15	95	1	5	71													
	3	45	C	0	MODERATE	16	8			TAv	55	100	0	16	100	0	0	0			55	100	15	16	100	0	0	240			
										EAv	55	100	45	8	100	0	0	360													
	4									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													
	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													
159	1	20	C	0	GOOD	17				TAv	0	20	20	17	100	0	0	340	131	13	0	20	20	17	100	0	0	340	108	-6	2
										EAv	0	20	0	0	100	0	0	0													
	2	30	C	0	MODERATE	16	8			TAv	20	50	30	16	100	0	0	480			20	50	30	16	100	0	0	480			
										EAv	20	50	0	8	100	0	0	0													
	3	70	C	0	POOR	13	7			TAv	50	120	0	13	100	0	0	0			50	120	20	13	100	0	0	260			
										EAv	50	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			
										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													
160	1	35	C	0	GOOD	17				TAv	0	35	35	17	100	0	0	595	133	15	0	35	35	17	100	0	0	595	111	-3	2
										EAv	0	35	0	0	100	0	0	0													
	2	20	C	0	MODERATE	16	8			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													
	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													
	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													

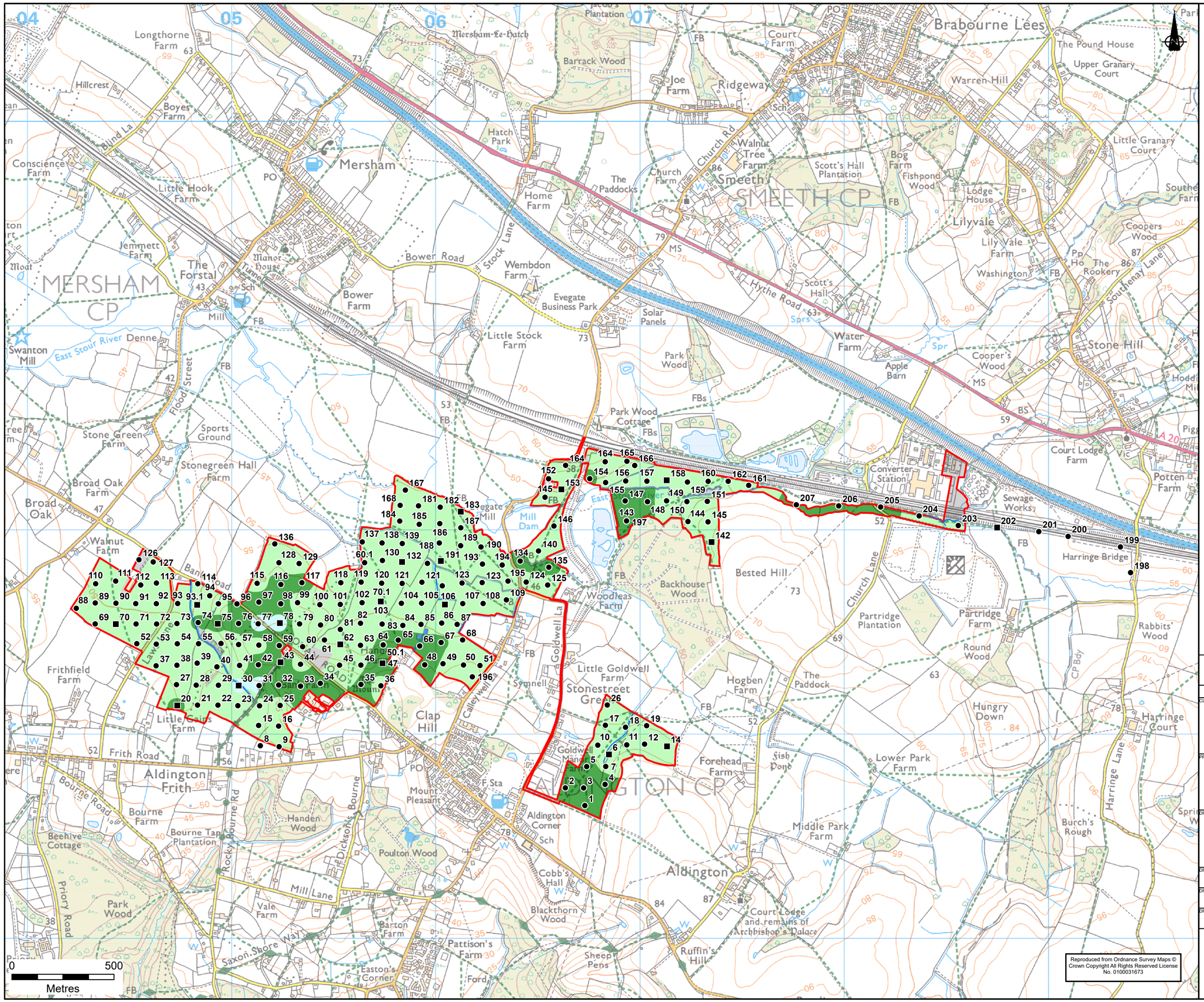
Data inputs										Droughtiness calculations																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	Limited to ALC grade							
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										
										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																			
162	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	112	-2	2							
										EAv	0	23	0	0	100	0	0	0																			
	2	38	C	0	MODERATE	16	8			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																			
	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										
										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																			
164	1	30	C	0	GOOD	17				TAv	0	30	30	17	100	0	0	510	133	15	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																			
	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																			
164	1	30	C	0	GOOD	17				TAv	0	30	30	17	100	0	0	510	133	15	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																			
	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																			
165	1	29	MCL	5	GOOD	18		1.0	0.5	TAv	0	29	29	18	95	1	5	497	124	6	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																			
	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																			
166	1	20	C	0	GOOD	17				TAv	0	20	20	17	100	0	0	340	126	8	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																			
	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																			
167	1	23	HCL	0	GOOD	18				TAv	0	23	23	18	100	0	0	414	123	5	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																			
	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	Limited to ALC grade							
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																			
	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																			
181	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																			
	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																			
182	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																			
	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																			
183	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																			
	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																			
184	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										
										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																			
185	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																			
	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																			
186	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																			
	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	Limited to ALC grade							
187	1	35	HCL	0	GOOD	18				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																				
	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	139	20									109	-5	2							
	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																				
188	1	36	HCL	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	31	HCL	0	POOR	12	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																				
	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	131	13									106	-8	2							
	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																				
189	1	35	HCL	0	GOOD	18				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																				
	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	130	12									105	-9	2							
	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																				
190	1	38	HCL	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	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	132	14									107	-7	2							
	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																				
191	1	37	HCL	0	GOOD	18				TAv	0	37	37	18	100	0	0	666			0	37	37	18	100	0	0	666											
										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	131	13									106	-8	2							
	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																				
192	1	38	HCL	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	20	HCL	0	POOR	12	7			TAv	38	58	12	12	100	0	0	144			38	58	20	12	100	0	0	240											
										EAv	38	58	8	7	100	0	0	56																				
	3	62	C	0	POOR	13	7			TAv	58	120	0	13	100	0	0	0			58	120	12	13	100	0	0	156											
										EAv	58	120	62	7	100	0	0	434	132	14									108	-6	2							
	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																				
193	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	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	141	23									116	2	2							
	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																												
						Av. water (soil)		Av. water (stones)		AP wheat													AP potatoes																
Survey Point	Horizon	Horizon thickness	Texture	Stones %	Structural condition	TAv %	EAv %	TAv %	EAv %	TAv/EAv	Start depth	End depth	Horiz. thickn.	TAv/EAv soil	% non stone	TAv/EAv stones	Stones %	AP wheat		AP(wheat) -MD(wheat)	Start depth	End depth	Horiz. thickn.	TAv top/sub soil	non-stone %	TAv stones	Stone %	AP potatoes		AP(potato) -MD(potato)	Limited to ALC grade							
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																			
	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																			
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																			
	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																			
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																			
	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																			
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																			
	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																			

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.

REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D

CLIENT

EPL 001 Limited

PROJECT

STONE STREET GREEN SOLAR

DRAWING TITLE

AGRICULTURAL LAND CLASSIFICATION

DRG No		REV
GM12014/002 APFP 5(2)(a)		01
DRG SIZE	SCALE	DATE
A2	1:12,500	May 2024
DRAWN BY	CHECKED BY	APPROVED BY
SW	KE	HK

wardell armstrong