Little Crow
Solar Park

Little Crow Solar Park, Scunthorpe

ENVIRONMENTAL STATEMENT: TECHNICAL APPENDICES

APPENDIX 10.1

AGRICULTURAL BASELINE REPORT

Revision: Submission
APFP Reg 5(2)(a)
PINS Reference: EN010101

Author: Daniel Baird
Date: October 2020

Document			
Document Properties			
Prepared By	Daniel Baird		
Title	Environmental Statement: Technical Appendices – Appendix 10.1 Agricultural Baseline Report		
Document Reference	7.37 LC TA10.1		
Version History			
Date	**Version**	**Status**	**Description/Changes**

Agricultural Baseline Report

Document Ref 7.37 LC TA10.1

1. Introduction

1.1 Brief

This report has been prepared by Daniel Baird Soil Consultancy Ltd ('Baird Soil'). It provides an assessment of the agricultural quality, Soil Resources and Farming Circumstances baseline for the construction, operation, maintenance and decommissioning of a ground mounted solar park and associated battery storage with an intended design capacity of over 50MWp (megawatts peak) at Little Crow Solar Park, Scunthorpe DN20 0BG.

The agricultural soil survey area is approximately 225 hectares and covers agricultural land to the east of the Scunthorpe steel works. A small area of agricultural land was added to the agricultural soil survey area after field survey work had been completed. As this added area is less than 1% of the total agricultural soil survey area an additional field survey visit to cover this land is considered disproportionate.

2. Agricultural Land Classification Methodology

The MAFF ALC system of grading land quality for use in land use planning purposes divides farmland into five grades according to the degree of limitation imposed upon land use by the inherent physical characteristics of climate, site and soils. Grade 1 land is of an excellent quality, whilst Grade 5 land has very severe limitations for agricultural use.

Accordingly, a detailed assessment of the survey area has been undertaken using the Ministry of Agriculture Fisheries and Food (MAFF) revised guidelines and criteria for Agricultural Land Classification[1] ('ALC') published October 1988.

The MAFF revised guidelines and criteria for ALC of October 1988 require that the following factors be investigated:

- Climate: Average Annual Rainfall (AAR) and Accumulated Temperature above 0°C between January and June (AT0);
- Site: Gradient, Micro Relief and Flooding;
- Soils: Texture, Structure, Depth, Stoniness, and Chemical Toxicity; and
- Interactive Factors Soil Wetness, Soil Droughtiness and Liability to Erosion.

Use of the ALC methodology is also supported by Natural England Technical Advice Note 049[2] (TIN049) published January 2009.

TIN049 describes a detailed ALC survey as having one sample point per hectare. To achieve this sample density and remove selection bias from the location of the sample points, their location was predetermined by positioning them at 100m intersections of the Ordnance Survey National Grid using a GPS.

The sample point data for the ALC assessment of the agricultural soil survey area is attached as an annex to this Agricultural Baseline Report

[1] Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land. Ministry of Agriculture Fisheries and Food, October 1988. http://archive.defra.gov.uk/foodfarm/landmanage/land-use/documents/alc-guidelines-1988.pdf

[2] Agricultural Land Classification: protecting the best and most versatile agricultural land (TIN049). Natural England, January 2009. http://publications.naturalengland.org.uk/publication/35012

3. Soil Resources Methodology

The Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites[3] provides guidance on the conservation of soil for beneficial reuse at development sites, safeguarding both the mass of the soil resource and its functional capacity. The application of this code of practice is voluntary, however following the guidance can deliver clear benefits in terms of the sustainable use of a finite resource, minimising the generation of waste and sediment from a construction site, and the cost effective delivery of the Development.

[3] Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, Defra 2011. https://www.gov.uk/government/publications/code-of-practice-for-the-sustainable-use-of-soils-on-construction-sites

4. Farming Circumstances Methodology

Current national planning guidance does not provide direction on the potential effect of development on individual farm businesses. In the absence of such guidance, this assessment follows the advice given by the superseded Planning Policy Guidance Note 7 ('PPG7') and maintained by the Design Manual for Roads and Bridges ('DMRB'), Volume 11 - Environmental Assessment[4]. This practice is in common with Environmental Impact Assessments ('EIA') for other qualifying development proposals, High Speed 2 EIA being a prominent example.

[4] Design Manual for Roads and Bridges, Volume 11 - Environmental Assessment
http://www.standardsforhighways.co.uk/dmrb/vol11/index.htm

5. Agricultural Land Classification Assessment

5.1 Climate

Climatological data for ALC are provided for 5km intersections of the National Grid by the Meteorological Office, in collaboration with the National Soil Resources Institute. The data from these points can be interpolated providing climate data for specific sites. Four points were selected for the Little Crow site to cover the change in elevation from west to east.

Table 1: Climate Data – Little Crow, Scunthorpe

Reference Point:	SE937098	SE939098	SE941098	SE943098
Altitude (m)	35	45	55	60
Average Annual Rainfall AAR (mm)	612	614	615	615
Accumulated Temperature AT0 (day degrees)	1374	1362	1351	1345
Moisture Deficit for wheat (mm)	106	105	104	103
Moisture Deficit for potatoes (mm)	96	95	94	93
Field Capacity Duration (days)	132	132	132	132

The four points show that as the land rises to the west, the land experiences slightly more rainfall and is cooler. This is sufficient to give a progressive though slight fall in moisture deficits for the two reference crops (wheat and potato), but insufficient to change the Field Capacity Days, the period the soil retains its maximum water content against gravity.

The main parameters used in the assessment of an overall climatic limitation are AAR as a measure of overall wetness, and AT0 as a measure of the warmth of the Site in the growing season.

Climate does not impose an overall limitation on ALC grade at this Site. Climate does however have an important influence on the interactive limitations, soil wetness and soil droughtiness, both through the input of water to soil through precipitation, and the removal of water by crops through the growing season.

5.2 The Site

The site straddles a pair of ridges running north south through the site. Land to the east has the highest elevation and is level to very slightly sloping to the east. Moving west the land is slightly sloping with a western aspect. Along the western edge of the site the line of smaller fields are level and on the lowest lying part of the site. There are no gradient limitations to grade in the site area, but to the south west where there is evidence of previous disturbance, some land is limited by microtopography, undulations in the surface that limit how the land may be cultivated.

5.3 Soils and Parent Materials

The British Geological Survey Geology of Britain viewer[5] shows the site to be underlain with a series of strata that are progressively exposed moving down the slope from east to west, resulting in the western half of the site having a number of narrow bands running north to south. The higher land to the east has a larger area of the uppermost strata, the Scawby Limestone. Moving west down the ridge slope the progressively lower strata exposed are the Kirton Cementstone Beds, Raventhorpe Beds and the Lower Lincolnshire Limestone Member. Limestone dominates or is present in all of these. Some of the limestone strata contain interbedded layers of clayey material.

On the low-lying land to the west a narrow band of Grantham Formation (Sandstone, siltstone and Mudstone) gives way to a broad area of Charmouth Mudstone formation.

Most of the low-lying Charmouth Mudstone and parts of the Kirton Cementstone are shown covered by a superficial deposit of the Sutton Sand Formation of wind-blown sands.

Detailed ALC survey of the site found soils that correspond to the range of parent materials described, with light textured, stony and calcareous soils predominating where the limestones were present, occasional pockets of heavy textured soils indicating the presence of interbedded mudstones exposed on the slope, and lastly very light sand soils formed where the superficial deposit was present.

Topsoil content of large stones (retained by a 2cm sieve) is high enough over large parts of the site to limit the land to Grade 3b by stoniness. Where topsoils have a sand texture the land is limited to Grade 3b owing to the very low structural stability that makes this soil vulnerable to wind and soil erosion.

5.4 Interactive Factors

The light textured and stony soil material can only retain a limited volume of plant available water, that in combination with the site climatic factors gives a soil droughtiness limitation.

Where areas of clayey subsoil is found the drainage of the soil profile is impaired, trapping excess water in the topsoil for an extended period and giving rise to a soil wetness limitation. Wet topsoils are vulnerable to structural damage from cultivation, traffic and livestock hooves, the vulnerability increasing with the clay content.

5.5 Agricultural Land Classification

Detailed survey of the site found agricultural land in ALC Grades 3a and 3b. The distribution of ALC grades within the site is shown on the attached Figure 1 (Drawing Ref DREG P18-0718_26), with areas given in Table 2 below.

Table 2 : ALC Grade Distribution

ALC Grade	Area (ha)	%
3a	36.6	16.3

[5] Geology of Britain Viewer, BGS http://www.bgs.ac.uk/data/mapViewers/home.html?src=topNav

3b	173.5	77.2
Non Agricultural	13.3	5.9
Land Not Surveyed	1.3	0.6
Total	**224.7**	**100.0**

Four separate areas of Grade 3a land are present within the agricultural soil survey area. Soil profiles are predominantly deep, freely drained and light textured, with soil droughtiness being the primary limitation limiting this land to Grade 3a. Some soil profiles were found with a clayey subsoil that impeded drainage overlain by a sandy loam topsoil. The impeded drainage leaves the land seasonally waterlogged (Wetness Class IV), which in conjunction with the sandy loam topsoil and local climate characteristics, gives a soil wetness limitation to Grade 3a.

Grade 3b land covers the majority of the site. This land is limited to Grade 3b by a wide range of factors, with some sample points having multiple limiting factors. Soil droughtiness is a common limiting factor where the light textured profile has a limited depth to the underlying rock. High stone content can further restrict the volume of soil able to retain crop available water. Some soil profiles are close enough to a 3a/3b boundary for soil droughtiness that the 3mm range in moisture deficit across the site can be relevant. Where this is the case care has been taken to apply the moisture deficit values from the data point with the closest elevation match.

Topsoil stone content is a prominent limitation, particularly for the north eastern quarter of the site. The presence of larger stones (retained by a 20mm sieve) is sufficiently high to limit the land to Grade 3b. As well as accelerating wear on cultivators, larger stones can interfere with the use of equipment such as precision seed drills.

Soil depth is sufficiently shallow on occasional soil profiles to limit the land to Grade 3b.

Where a heavy textured subsoil is found the soil profile is seasonally waterlogged (Wetness Class IV) which in conjunction with a clay loam topsoil gives a soil wetness limitation to Grade 3b.

Finally, where the topsoil has a sand texture, the maximum grade permissible is Grade 3b as the extremely light material is so vulnerable to erosion by water and wind.

Non-Agricultural land within the agricultural soil survey area comprises several small wooded areas and tree belts. The farm tracks crossing the survey area have not been mapped as non-agricultural land to simplify mapping at this scale.

The Land Not Surveyed comprises a single small field that projects into Santon Wood to the north. This area was added after fieldwork for the remainder of the site had been completed. As it is 1.3ha, 0.6% of the agricultural soil survey area, and is adjacent to a large block of Grade 3b land, an additional site visit to assess this area was considered disproportionate.

5.6 Soil Resources

As described above, soils within the agricultural soil survey area are predominantly light textured (sandy loams and loamy sands) with pockets of clayey profiles over exposures of mudstone strata, and areas of very light sand profiles in areas of wind-blown sand superficial deposits. Conventional arable management with ploughing each year has led to a decline in topsoil organic matter, impairing the stability of topsoil aggregates. This in turn reduces rainfall infiltration and increases vulnerability to soil erosion by both wind and water.

Under the proposed development, the existing soil resource will remain in place with a year round grass cover grazed by sheep. This year round grass cover will serve to prevent bare soil surfaces that are vulnerable to erosion, and enable soil organic matter to recover to a new higher equilibrium. The development will in effect be a 35 year fallow period safeguarding the soil resource and enhancing its future productive capacity.

5.7 Farming Circumstances

Two farm businesses occupy the agricultural soil survey area. The first, Farm Business A, manages land to the east of the site, north of Gokewell Strip. The second, Farm Business B, manages the remainder of the site. To the east of the survey area is a housed poultry unit managed by a separate farm business. This poultry unit sits outside of the Order Limits.

Farm Business A

Farm Business A is a large arable enterprise that is the owner occupier of its land within the agricultural soil survey area. The farm manages a total area of approximately 4000 acres (1600ha) owner occupied land. Of this around 500acres (200ha) are woodland and 150 acres (60ha) are grassland, the remainder being arable land. Smaller areas of arable land are occasionally rented in on a short term basis where suitable land is available to meet the farm's needs. In addition some of the farm's land is let out to contract growers of vining pea crops, with this contractor grown crop integrated within a standard rotation of combinable cereals and break crops.

Woodland is managed for timber and woodchip biomass production.

The farm has no livestock enterprise, the grassland being under Countryside Stewardship agreements to provide grassland habitat. This includes the permanent grass area within the site found north of the Gokewell Strip. The remainder of the Farm Business A land within the agricultural soil survey area is under arable management.

The land within the agricultural soil survey area is an outlying parcel, with the main centre of Farm Business A being to the east, off the B1208. In addition to the arable and woodland enterprises, the farm has cottages at its main farm unit, let as residential dwellings rather than holiday units.

This large farm business employs year round six full time equivalent staff. In addition, it seasonally employs a further four full time equivalents.

Farm Business B

Farm Business B manages the remainder of the agricultural land within the agricultural soil survey area and occupies this as a contract farmer on behalf of the landowner. In addition

to the land contract farmed within the site area Farm Business B occupies approximately 300 acres (120ha) of land on a secure agricultural tenancy. The land within the site is outlying land from the farms main unit.

Land within the site area is predominantly arable with a small area of un-grazed permanent grass cover to the south west.

When interviewed in 2019 the farm manager was downsizing their farm business, dropping a potato contracting enterprise and not seeking to continue or replace the arable contracting arrangement for the land area within the agricultural soil survey area.

Arable, both on the farm's land and contract farming, is the main enterprise. In addition Farm Business B is part of a cooperative undertaking vining pea contract growing for Birds Eye.

The farm has three cottages at its main unit on residential lets.

Poultry Barns

A housed poultry unit adjoins the agricultural soil survey area to the east, outside of the Order Limits. The unit is connected to the network of farm tracks the run through the agricultural soil survey area, however it has independent access to the B1207 to the east.

5.8 Effect of Development on Farm Businesses

Farm Business A

Farm Business A would temporarily lose an area of outlying land for arable production. The farm manager anticipates seeking to replace the area through acquisition of additional land and/or renting in more land as suitable land becomes available. As the farm is seeking to expand it is planning to acquire additional land regardless of the proposed development.

The development will provide the farm business with an additional income that does not require investment, or its worker and machinery time resources.

Farm Business B

Farm Business B will cease contract farming land within the site area regardless of the development of the proposed solar park as the farmer is seeking to scale down operations and insecure outlying land like that within the site will be the first in line.

Poultry Barns

The Poultry business will not lose any land to the proposed solar park. The primary access to the unit is off the B1207 and this does not pass through the development area. So although connected to the network of farm tracks that pass through the site, the poultry farm has no need to make use of these.

Annex 1

ALC Survey Data for Agricultural Soil Survey Area

Little Crow Solar Soil Data

Survey week beginning 22July 2019

Mostly fine with some heavy rainstorms

1 SE 94000 10600; 32m; 2deg NW; wheat

30cm; MSL; 7.5YR3/2; 2% hard stone; stop for stone

2 SE 94100 10600 47m; 4deg w; wheat

30cm; LMS; 10YR3/2; 5% limestone

40cm; LMS; 10YR4/4; 5% limestone; stop for stone

3 SE94200 10600; 48m; 4deg W; Wheat

30cm; MCL; 10YR3/2; 5% hard limestone

60+; C; 10YR5/1+5/4; 5% limestone; Gley, SP

4 SE 94300 10600; 61m; 4 deg W; wheat

30cm; MSL; 7.5YR3/2; 10% hard limestone

40cm; MSL; 7.5YR4/4; 10% hard limestone; stop for stone

5 SE 94400 10600; 62m; wheat; level hill top

30cm; MSL; 10YR3/2; 20% hard limestone, 10%>2

45cm; MSL; 10YR4/4; 20% hard limestone; stop for stone

6 SE 94501 10598; level; plough

25cm; 7.5YR3/2; 20% hard limestone, 15%>2, 8% >6; stop for stone

7 SE 94600 10600; 55m; level; plough

30cm; 7.5YR3/2; 20% hard limestone, 15%>2, 8%>6

50cm; MSL; 5YR5/6; 2% hard limestone; stop for stone

8 SE 94700 10600; 54m; level; plough

30cm; MSL; 7.5YR3/2; 20% hard limestone, 15%>2, 8%>6; stop for stone at 30; smear of clay above stone

9 SE 94800 10800; 53m; level; plough

30cm; MSL; 7.5YR3/2; 20% hard limestone, 15%>2, 8%>6

50cm; MSL; 5YR5/6; 20% hard limestone

60cm; C; 5YR5/4; 20% hard limestone; stop for stone

11 SE 93900 10500; 25m; 2deg W; wheat

30cm; MSL; 7.5YR3/2; 2% hard stone; stop for stone

12 SE 94000 10500; 33m; level; wheat

30cm; MSL; 7.5YR3/2; 2% hard stone; stop for stone

13 SE 94100 10500; 44m; 2deg W; wheat

30cm; LMS; 10YR3/2; 5% stone

80cm; LMS; 10YR4/4; 5% stone

120cm; LMS; 10YR5/1+5/4; 2% stone

14 SE94200 10600; 48m; 5deg W; wheat

30cm; MCL; 10YR3/2; 5% limestone; calc

50cm; MCL; 10YR3/2; 5% limestone

70+; C; 10YR5/1+5/4; 5% limestone; Gley, SP

15 SE 94300 10500; 62m; 4deg W; wheat

30cm; MCL; 10YR3/2; 10% limestone; calf

60+; C; 10YR5/1+5/4; 10% limestone; gley; SP

16 SE 94400 10500; 63m;

30cm; MSL; 10YR3/2; 20% hard limestone, 10%>2

45cm; MSL; 10YR4/4; 20% hard limestone; stop for stone

17 SE 94500 10500; 61m; level; wheat

30cm; MSL/MCL; 7.5YR3/2; 20% hard limestone, 15%>2; stop for stone at 30

18 SE 94600 10500; 53m; level; plough

30cm; MSL/MCL; 7.5YR3/2; 20% hard limestone, 15%>2; stop for stone at 30

19 SE 94700 10500; 50m; level

30cm; MCL; 7.5YR3/2; 20% hard limestone, 15%>2; stop for stone at 30

20 SE 94800 10500; 49m; level

30cm; MSL/MCL; 7.5YR3/2; 20% hard limestone, 15%>2; stop for stone at 30

21 SE 94900 10500; 49m; level

30cm; MSL; 7.5YR3/2; 20% hard limestone, 15%>2, 8%>6

40cm; MSL; 7.5YR5/4; 20% hard limestone; stop for stone

22 SE 93600 10400; 26m; level; wheat

30cm; MS; 10YR3/2; 0%

70cm; MS; 10YR4/2; 0%

120cm; MS; 10YR6/1; 0%

23 SE 93700 10400; 27m; level; wheat

30cm; MS; 10YR3/2; 0%

70cm; MS; 10YR4/2; 0%

120cm; MS; 10YR6/1; 0%

25 non agricultural

26 SE 94000 10400; 29m; 2deg S; wheat

30cm; MSL; 7.5YR3/2; 2% hard stone; stop for stone

27 brambles

28 SE94200 10400; 43m; 4deg W; wheat

30cm; MSL; 7.5YR3/2; 10% limestone

40cm; MSL; 7.5YR4/4; 10% limestone; stop for stone

29 SE 94300 10400; 61m; 4deg W; wheat

30cm; MCL; 10YR3/2; 10% limestone; calf

60+; C; 10YR5/1+5/4; 10% limestone; gley; SP

30 SE 94400 10400; 56m; wheat; level

30cm; MSL; 10YR3/2; 20% hard limestone, 10%>2

45cm; MSL; 10YR4/4; 20% hard limestone; stop for stone

31 SE 94500 10400; 58m; level; wheat

30cm; MSL; 10YR3/2; 20% hard limestone, 10%>2

45cm; MSL; 10YR4/4; 20% hard limestone; stop for stone

32 SE 94600 10400; 54m; 2deg SE

30cm; MCL; 7.5YR3/2; 20% hard limestone

40cm; MCL; 7.5YR4/4; 20% hard limestone

45cm; C; 7.5YR5/4; 30% hard limestone; stop for stone

33 SE 94700 10300; 53m; 2deg E;

40cm; MSL; 7.5YR5/4; 20% hard limestone; stop for stone

34 SE 94800 10300; 53m;

30cm; MSL; 7.5YR4/2; 20% hard limestone, 15%>2; stop for stone at 30

35 SE 9490010400; 48m; level; plough

30cm; MSL; 7.5YR3/2; 20% hard limestone, 15%>2

45cm; MSL; 7.5YR5/4; 20% hard limestone

50cm; C; 7.5YR4/4; 30% hard limestone, stop for stone at 50

36 SE 95000 10400; 46m; level

30cm; MS; 7.5YR4/2; 8% hard limestone

50cm; MS; 7.5YR5/4; 8% hard limestone

80cm; LMS; 7.5YR5/4; 8% hard limestone

100cm; SCL; 7.5YR5/4; 20% hard limestone; stop for stone at 100

37 SE 93600 10300; 28m; level; wheat; compaction

30cm; MS; 10YR3/2; 0%

70cm; MS; 10YR4/2; 0%

120cm; MS; 10YR6/1; 0%

38 SE 93700 10300; 26m; level; wheat

30cm; MS; 10YR3/2; 0%

70cm; MS; 10YR4/2; 0%

120cm; MS; 10YR6/1; 0%

39 SE 93800 10300; 23m; 4deg W; wheat

30cm; LMS; 10YR3/2; 2% hard stone; stop for sandstone

40 SE 93900 10300; 31m; 4deg N; wheat

30cm; MSL; 10YR3/2; 2% limestone

60+; HCL; 10YR5/6+6/1; 2% limestone; gley, SP

42 Brambles

43 SE 94200 10300; 40m; 5deg w; wheat

30cm; MCL; 10YR3/2; 10% limestone

45cm; MCL; 7.5YR5/4; 10% limestone; stop for stone

44 SE 94300 10300; 62m; 4deg W; wheat

30cm; MCL; 10YR3/2; 10% limestone; calf

60+; C; 10YR5/1+5/4; 10% limestone; gley; SP

45 SE 94400 10400; 54m; level; wheat

30cm; MSL; 10YR3/2; 20% hard limestone, 10%>2

45cm; MSL; 10YR4/4; 20% hard limestone; stop for stone

46 SE 94500 10300; 59m; level; wheat

30cm; MSL; 10YR3/2; 20% hard limestone, 10%>2

45cm; MSL; 10YR4/4; 20% hard limestone; stop for stone

47 SE 94600 10300; 52m; 2deg SE

35cm; HCL; 7.5YR3/2; 20% hard limestone, 15%>2cm

40cm; C; 7.5YR4/4; 30% hard limestone; stop for stone

48 SE 94700 10300; 50m; 1deg SE

30cm; MSL; 7.5YR3/2; 20% hard limestone, 15%>2

40cm; MSL; 7.gYR4/4; 20% hard limestone; stop for stone

50 SE 94900 10300; 46m; 1deg SE

30cm; MSL; 7.5YR3/2; 20% hard limestone, 15%>2

40cm; MSL; 7.gYR4/4; 20% hard limestone; stop for stone

51 SE 95000 10300; 49m; level

30cm; MSL; 7.5YR3/2; 20% hard limestone, 15%>2

52 off site

53 SE 93600 10200; 32m; level; wheat

30cm; MS; 10YR2/2; 0%

80cm; MS – organic sand; 10YR2/2; 0%

120cm; MS; 10YR6/1; 0%

54 SE 93705 10200; 26m; 2deg W; wheat

30cm; MS; 10YR4/4; 0%

50cm; MS; 10YR5/3; 0%

90cm; MS; 10YR6/2 + 5/4; 0%; stop for stone

55 SE 93800 10200; 31m; 4deg west; wheat

30cm; HCL; 10YR3/2; 2% hard stone

60+; C; 10YR5/1+5/6; 2% hard stone; gley, SP

56 SE 93900 10200; 35m; level; wheat

30cm; MSL; 7.5YR3/2; 2%; hard stone

45cm; MSL; 7.5YR5/4; 2% hard stone; stop for stone

57 SE 94000 10200; 30m; 2deg W; wheat

30cm; LMS; 10YR3/2; 2% stone

120cm; MS; 10YR6/6; 0%

58 SE 94100 10200; 34m; 3deg W; wheat

30cm; LMS; 10YR3/2; 5% limestone

40cm; LMS; 10YR4/4; 5% limestone

80cm; LMS; 10YR5/6; 5% limestone

90cm; MS; 10YR5/1+4/1; 0%; stop for sandstone

59 SE 94200 10200; 42m; 4deg W; wheat

30cm; MSL; 10YR3/2; 10% limestone

40cm; MCL; 10YR5/4; 10% limestone

60+; HCL; 10YR5/1+5/6; 10% limestone; gley, SP

60 SE 94300 10200; 62m; 4deg W; wheat

30cm; MSL; 7.5YR3/2; 10% limestone; stop for stone

61 SE 94400 10200; 56m; level; wheat

30cm; MSL; 10YR3/2; 20% hard limestone, 10%>2

45cm; MSL; 10YR4/4; 20% hard limestone; stop for stone

62 SE 94500 10200; 57m; wheat; level

30cm; MSL; 10YR3/2; 20% hard limestone, 10%>2

45cm; MSL; 10YR4/4; 20% hard limestone; stop for stone

63 SE 94600 10200; 54m; level

30cm; MSL; 7.5YR3/2; 20% hard limestone, 15%>2

40cm; MSL; 7.5YR4/4; 20% hard limestone; stop for stone

64 SE 94700 10200; 52; 2deg SE; fallow

20cm; MSL; 7.5YR3/2;

65 SE 94800 10200; 51m; level

30cm; MSL; 7.5YR3/2; 20% hard limestone, 15%>2

40cm; MSL; 7.5YR4/4; 20% hard limestone; stop for stone

66 SE 94900 10200;50m; plough; level

30cm; MSL; 7.5YR3/2; 20% hard limestone, 15%>2

40cm; MSL; 7.5YR4/4; 20% hard limestone; stop for stone

67 SE 95000 10200; 46m; plough; level

30cm; MSL; 7.5YR3/2; 20% hard limestone, 15%>2

40cm; MSL; 7.5YR4/4; 20% hard limestone; stop for stone

68 SE 93500 101 ; 26m; level; wheat

30cm; MS; 10YR3/2; 0%

70cm; MS; 10YR4/2; 0%

120cm; MS; 10YR6/1; 0%

69 SE 93700 10100; 28m; 2deg W; wheat

30cm; MS; 10YR3/2; 2% hard limestone; stop for stone at 30

70 SE 93800 10100; 35m; 2deg W; wheat; near ridgeline

30cm; MSL; 10YR3/2; 5% hard limestone

70+; HCL; 10YR5/1 + 5/6; 5% hard limestone; Gley, SP

71 SE 93900 10100; 36m; 2deg w; wheat

30cm; MS; 10YR4/2; 0%

60cm; MS; 7.5YR4/4; 0%

100cm; MS; 10YR7/2 + 5/6; 0%; stop for stone

72 SE 94000 10100; 34m; 4deg W; wheat

30cm; MS; 10YR4/4; 0%

50cm; MS; 10YR5/3; 0%

90cm; MS; 10YR6/2 + 5/4; 0%; stop for stone

73 SE 94100 10100; 40m; 4deg W; wheat

30cm; MS; 10YR4/4; 0%

50cm; MS; 10YR5/3; 0%

90cm; MS; 10YR6/2 + 5/4; 0%; stop for stone

74 SE 94200 10095; 46m; 5deg W; wheat

30cm; LMS; 10YR3/2; 2% hard stone

70cm; LMS; 10YR4/2; 2% hard stone

90cm; LMS; 10YR5/6; 2% hard stone; stop for sandstone

75 disturbed/midden pad

76 SE 944 10100; 55m; level; wheat

30cm; MSL; 10YR3/2; 20% hard limestone, 10%>2

45cm; MSL; 10YR4/4; 20% hard limestone; stop for stone

77 SE 94500 10100; 56m; wheat; level

30cm; MSL; 10YR3/2; 20% hard limestone, 10%>2

45cm; MSL; 10YR4/4; 20% hard limestone; stop for stone

78 SE 94600 10100; 55m; 2deg SE; fallow

30cm; MS; 7.5YR4/3; stoneless

100cm; MS; 7.5YR5/6; stoneless

120cm; void

79 SE 94700 10100; 55m

30cm; MSL; 10YR3/2; 15% hard limestone

45cm; MSL; 10YR4/4; 15% hard limestone; stop for stone with smear of Clay at 45

80 SE 94800 10100; 51m; 2deg E; plough

30cm; MCL; 10YR3/2; 10% hard limestone

45cm; MCL; 10YR4/4; 10% hard limestone; stop for stone at 45

81 SE 93500 10000; level; wheat

30cm; MS; 10YR4/2; 0%

40cm; MS; 10YR4/4; 0%

100cm; MS; 10YR7/1; 0%; stop at 100

84 SE 93800 100000; 37m; level, wheat

30cm; LMS; 10YR4/2; 5% hard stone

40cm; LMS; 10YR4/4; 5% hard stone

80cm; MS; 10YR5/6; 0%; compacted; stop at 80cm

85 SE 93900 10000; 38m; level; wheat; sand deposition

30cm; MS; 10YR4/2; 0%

50cm; LMS; 10YR4/3; 0%; stop for stone

123 SE 93800 09700; 37m; level; wheat

30cm; LMS; 7.5YR3/2; 5% hard stone

50cm; LMS; 7.5YR5/4; 5% hard stone; Stop for stone at 50cm

86 SE 94000 10000; 39m; 4deg W; wheat

30cm; LMS; 7.5YR3/2; 10% limestone; stop for stone

87 SE 94100 10000; 45m; 4deg W; limestone

30cm; HCL; 10YR3/2; 5% hard limestone

40cm; HCL; 10YR4/4; 5% hard limestone

60+; C; 10YR4/1-5/1 + 5/8; 0%; Gley; SP

89 SE 94300 10000; 57m; level; wheat

30cm; MSL; 7.5YR3/2; 10% limestone; stop for stone

90 SE 94400 10000; 53m; level; wheat

30cm; MSL; 10YR3/2; 20% hard limestone, 10%>2

45cm; MSL; 10YR4/4; 20% hard limestone; stop for stone

91 SE 94500 10000; 56m; wheat; level

30cm; MCL; 10YR3/2; 20% hard limestone

40cm; C; 10YR5/4; 20% hard limestone; stop for stone at 40

92 SE 94600 10000; 54m; level; plough

30cm; LMS; 10YR3/2; stoneless

45cm; LMS; 10YR5/4; stoneless

120cm; MS; 10YR6/4; stoneless

93 SE 94700 10000; 54m;

30cm; MSL; 10YR3/2; 15% hard limestone

40cm; MSL; 10YR4/4; 15% hard limestone; stop for stone

94 SE 94800 10000; 51m

30cm; MCL; 10YR3/2; 10% hard limestone

45cm; MCL; 10YR4/4; 10% hard limestone; stop for stone at 45

95 SE 93500 09900; 26m; level; wheat

30cm; MS; 10YR2/1; 0%

100cm; MS; 5YR5/4; 0%

120cm; MS; 7.5YR7/4; 0%; iron staining on boundary to horizon above

97 SE 93700 099000; 31m; 4deg W, wheat

30cm; LMS; 10YR4/2; 5% hard stone

40cm; LMS; 10YR4/4; 5% hard stone

80cm; MS; 10YR5/6; 0%; compacted; stop at 80cm

98 SE 93800 09900; 38m; level; wheat

30cm; LMS; 7.5YR3/2; 5% hard stone

50cm; LMS; 7.5YR5/4; 5% hard stone; Stop for stone at 50cm

100 SE 94000 09895; 41m; 4deg W; wheat; offset for archaeology trench

30cm; LMS; 7.5YR3/2; 10% limestone; stop for stone

101 SE 94100 09900; 47m; 4deg W; wheat

30cm; LMS; 7.5YR3/2; 10% limestone; stop for stone

103 SE 94300 09900; 56m; wheat; level

30cm; MSL; 7.5YR3/2; 10% limestone; stop for stone

104 SE 94400 09900; 55m; level, wheat

30cm; MSL; 10YR3/2; 20% hard limestone, 10%>2

45cm; MSL; 10YR4/4; 20% hard limestone; stop for stone

105 SE 94500 09900; 53m; wheat; level

30cm; MCL; 10YR3/2; 20% hard limestone

40cm; C; 10YR5/4; 20% hard limestone; stop for stone at 40

106 SE 94600 09900; 56m; 2deg E; plough

30cm; MCL; 10YR3/2; 5% hard limestone

60cm; MCL; 7.5YR5/4; 5% hard limestone

120cm; HCL; 5YR5/6; 5% hard limestone

108 SE 94800 09900; 50m; 1deg E

25cm; HCL; 10YR3/2; 10% hard limestone; Calc

40cm; C; 7.5YR5/4+5/1; 10% hard limestone; stop for stone at 40; Glen, too shallow for SP

109 SE 93500 09800; 26m; level dune top; wheat

40cm; MS; 10YR2/1; 0%

110cm; MS; 5YR5/4; 0%

111 SE 93700 09800; 31m; 5deg W; wheat

30cm; MSL; 7.5YR3/2; 5% hard stone

50cm; LMS; 7.5YR4/4; 5% hard stone

80cm; MS; 7.5YR5/6; 0%; compacted; stop at 80cm

112 SE 93800 09800; 38m; level; wheat

30cm; LMS; 7.5YR3/2; 5% hard stone

50cm; LMS; 7.5YR5/4; 5% hard stone; Stop for stone at 50cm

114 SE 94000 09800; 41m; wheat; 4deg W

30cm; LMS; 7.5YR3/2; 10% limestone; stop for stone

115 SE 94100 09800; 52m; 4deg W; west

30cm; MSL; 7.5YR3/2; 10% limestone; stop for stone

117 SE 94300 09800; 54m; level; wheat

30cm; MSL; 7.5YR3/2; 10% limestone; stop for stone

118 SE 94400 09700; 52m; level; wheat

30cm; MCL; 10YR3/2; 20% hard limestone, 10%>2

50cm; MCL; 10YR4/4; 20% hard limestone; stop for stone

119 SE 94500 09800; 54m; wheat; level

30cm; MCL; 10YR3/2; 20% hard limestone

40cm; C; 10YR5/4; 20% hard limestone; stop for stone at 40

120 SE 93500 09700;22m; level; wheat

30cm; MS; 10YR4/2; 0%

40cm; MS; 10YR4/4; 0%

100cm; MS; 10YR7/1; 0%; stop at 100

122 SE 93700 09700; 31m; 4deg W; wheat

30cm; HCL; 10YR3/2; 2% hard stone

60+; C; 10YR5/1+5/6; 2% hard stone; Gley,SP

123 SE 93800 09700; 37m; level; wheat

30cm; LMS; 7.5YR3/2; 5% hard stone

50cm; LMS; 7.5YR5/4; 5% hard stone; Stop for stone at 50cm

124 ditch

125 SE 94000 09700; 41m; 4deg W; wheat

30cm; LMS; 7.5YR3/2; 10% limestone; stop for stone

126 SE 94100 09700; 50m; 4deg W; wheat

30cm; MSL; 7.5YR3/2; 10% limestone; stop for stone

127 SE 94200 09700; 53m; level; wheat

30cm; MSL/MCL; 7.5YR3/2; 10% limestone; stop for stone

128 SE 94300 09700; 55m; level; wheat

30cm; MSL; 7.5YR3/2; 10% limestone; stop for stone

129 SE 94400 09700; 56m; level; wheat

30cm; MCL; 10YR3/2; 20% hard limestone

40cm; C; 10YR5/4; 20% hard limestone; stop for stone at 40

130 SE 94500 09700; 53m; wheat; level

30cm; MCL; 10YR3/2; 20% hard limestone

40cm; C; 10YR5/4; 20% hard limestone; stop for stone at 40

131 SE 93500 09600; level; wheat

30cm; MS; 10YR4/2; 0%

40cm; MS; 10YR4/4; 0%

100cm; MS; 10YR7/1; 0%; stop at 100

133 SE 93700 09600; 30m; 4deg W; wheat; disturbed

30cm; MSL; 7.5YR3/2; 5% hard stone

50cm; MSL; 7.5YR5/4; 5% hard stone and brick; stop for stone

134 SE 93800 09600; 39m; level; wheat

30cm; MSL; 7.5YR4/2; 20% hard stone, >15%>2cm

40cm; MSL; 7.5YR4/4; 30% hard stone; stop for stone

135 ditch

136 SE 94000 09600; 40m; 5deg W; wheat; large rills and sediment deposition

30cm; MS; 10YR4/2; stoneless

40cm; MS; 10YR5/6; stoneless

65cm; LMS; 10YR4/4; stoneless

100cm; LMS; 10YR5/6; Stoneless

120cm; C; 10YR5/1; stoneless

137 SE 94100 09600; 54m; 2deg W; barley

30cm; MSL; 7.5YR3/2; 10% limestone

40cm; MSL; 7.5YR4/4; 20% limestone; stop for stone at 40cm

138 SE 94200 09600; 65m; level; barley

30cm; MSL; 7.5YR3/2; 10% limestone

40cm; MSL; 7.5YR4/4; 20% limestone; stop for stone at 40cm

139 ditch

141 SE 93700 09500; 27m; 5deg W; barley

30cm; LMS; 7.5YR3/2; 0%

40cm; LMS; 7.5YR4/4; 0%

100cm; LMS; 7.5YR5/4; 0%

120cm; MS; 5YR5/4; 0%

142 SE 93800 09500; 34m; 2deg NW

30cm; MSL; 10YR3/2; 10% hard stone; stop for stone

143 SE 93900 09500; 39m; 2deg W; barley

30cm; MS; 7.5YR3/2; 0%

40cm; MS; 7.5YR4/4; 0%

120cm; MS; 7.5YR5/6; 0%

144 SE 94000 09500; 44m; 4deg W; barley

30cm; LMS; 10YR3/2; 5% hard stone

60cm; LMS; 10YR5/4; 5% hard stone; stop for stone at 60

145 SE 94100 09500; 53m; 2deg W; barley

20cm; MCL; 7.5YR3/2; 20% limestone, >15%>2cm; stop for stone

146 SE 94200 09500; 56m; level; barley

30cm; MCL; 10YR3/2/ 20% hard limestone, >15%>2cm; stop for stone

147 SE 94300 09500; 58m; level; barley

20cm; MSL; 7.5YR3/2; 25% hard stone, >15%>2cm, >10%>6cm

148 SE 94400 09500; 54m; level; barley

30cm; MSL; 10YR4/4; 10% limestone

60cm; LMS; 10YR5/6/ 10% limestone

80+; C; 10YR5/1; 5% limestone

149 SE 94500 09500; 50m; level; barley

30cm; MSL; 10YR3/2; 10% limestone

40cm; MSL; 10YR4/4; 20% limestone

70cm; C; 10YR5/1+5/6; 10% limestone; Gley, SP; stop for stone at 70cm

150 SE 93300 09400; 20m; level; grass; disturbed

20cm; LMS; 5YR4/3; 2% stone; stop at 20cm

151 SE 93400 09400; 21m; level; microtopography limit to 3b, tussocks and 0.5m diameter potholes

152 SE 93500 09400; 21m; level; microtopography limit to 3b, tussocks and 0.5m diameter potholes

153 SE 93600 09400; 21m; level; microtopography limit to 3b, tussocks and 0.5m diameter potholes

154 SE 93700 09400; 38m; 5deg w; barley

30cm; MSL; 10YR3/2; 2% hard stone

60cm; MSL; 10YR4/3+5/1+5/6; 0% gley

80+; C; 10YR5/1+5/6; 0%; gley, SP

155 SE 93800 09400; 33m; 2deg W; barley

30cm; MS; 7.5YR3/2; 0%

40cm; MS; 7.5YR4/4; 0%

120cm; MS; 5YR4/4; 0%

156 SE 93900 09400; 40m; 2deg W; barley

30cm; MS; 7.5YR3/2; 0%

40cm; MS; 7.5YR4/4; 0%

120cm; MS; 7.5YR5/6; 0%

157 SE 94000 09400; 49m; 4deg W; barley

20cm; LMS; 10YR3/2; 10% hard stone; stop for stone

158 SE 94100 09400; 54m; 2deg W; barley

20cm; MCL; 7.5YR3/2; 20% limestone, >15%>2cm; stop for stone

149 SE 94200 09400; 58m; level; barley

30cm; MCL; 10YR3/2/ 20% hard limestone, >15%>2cm; stop for stone

160 SE 94300 09400; 56m; level; barley

20cm; MSL; 7.5YR3/2; 15% limestone

40cm; MSL; 7.5YR4/4; 10% hard stone; stop for stone

161 SE 94400 09400; 59m; level; barley

30cm; MSL; 10YR3/2; 5% limestone

40cm; MSL; 10YR4/4; 5% limestone

80+; C; 10YR5/6+5/1; 10% limestone; gley, SP

162 SE 94500 09400; 55m; level; barley

30cm; MSL; 7.5YR3/2; 10% hard limestone; stop for stone at 30cm

163 SE 93300 09300; 22m; level; grass; disturbed

40cm; LMS; 5YR4/3; 2% stone; stop at 40cm

164 SE 93400 09300; 21m; level; grass;

30cm; MS; 10YR4/2; 0%

40cm; MS; 10YR4/4; 0%

100cm; MS; 10YR7/1; 0%; stop at 100

165 SE 93500 09300; 24m; level; grass - Podzol

30cm; OMS; 10YR2/1; 0%

100cm; MS; 10YR7/1; 0%

120cm; MS; iron stained; 0%

167 SE 93700 09300; 33m; 4deg W; barley

30cm; MSL; 7.5YR3/2; 2% stone

60cm; MSL; 7.5YR5/4; 2% stone; stop for stone

168 SE 93800 09300; 38m; 2deg w; barley

30cm; MS; 7.5YR3/2; 2% hard stone

40cm; MS; 7.5YR4/4; 2% hard stone

60cm; MS; 10R4/6 iron pan; 2% hard stone

120cm; MS; 7.5YR6/4+iron stain; 2% hard stone

169 SE 93900 09300; 44m; 2deg W; barley

30cm; MS; 7.5YR3/2; 0%

40cm; MS; 7.5YR4/4; 0%

120cm; MS; 7.5YR5/6; 0%

170 SE 94100 09300; 55m; level; barley

20cm; MCL; 7.5YR3/2; 20% limestone, >15%>2cm; stop for stone

171 SE 94200 09300; 56m; level; barley

30cm; MCL; 10YR3/2/ 20% hard limestone, >15%>2cm; stop for stone

172 SE 94300 09300; 54m; level; barley

20cm; MSL; 7.5YR3/2; 25% hard stone, >15%>2cm, >10%>6cm

173 SE 94400 09300; 57m; level; barley

30cm; HZCL; 10YR4/4; 10% limestone; calc

40cm; HZCL; 10YR4/4; 10% limestone

50cm; ZL; 10YR7/2; 10% limestone; stop for stone

174 SE 94500 09300; 56m; level; barley

30cm; MS; 7.5YR3/2; 2% hard stone

40cm; MS; 7.5YR4/4; 2% hard stone

60cm; MS; 10R4/6 iron pan; 2% hard stone

120cm; MS; 7.5YR6/4+iron stain; 2% hard stone

175 SE 94600 09300; 54m; level; barley

30cm; LMS; 7.5YR3/2; 15% hard stone

176 SE 93300 09100; 21m; level; grass; disturbed

20cm; LMS; 5YR4/3; 2% stone; stop at 20cm

177 SE 93400 09200; 21m; level; grass;

30cm; MS; 10YR4/2; 0%

40cm; MS; 10YR4/4; 0%

100cm; MS; 10YR7/1; 0%; stop at 100

178 SE 93500 09200; 24m; level; grass

30cm; MS; 10YR4/2; 0%

40cm; MS; 10YR4/4; 0%

100cm; MS; 10YR7/1; 0%; stop at 100

179 SE93605 09200; 31m; 2deg W; barley

30cm; MSL; 7.5YR3/2; 2% hard stone

80cm; MSL; 7.5YR4/4; 2% hard stone

120cm; MS; 7.5YR5/4; 0%

180 SE 93700 09200; 32m; 4deg W; barley

30cm; MSL; 7.5YR3/2; 10% hard stone; stop for stone at 30

181 SE 93800 09200; 37m; 2deg W; barley

30cm; MS; 7.5YR3/2; 0%

40cm; MS; 7.5YR4/4; 0%

120cm; MS; 7.5YR5/6; 0%

182 SE 93900 09200; 46m; 4deg W; barley

30cm; MS; 7.5YR3/2; 0%

40cm; MS; 7.5YR4/4; 0%

120cm; MS; 7.5YR5/6; 0%

183 SE 94100 09200; 57m; level; barley

20cm; MCL; 7.5YR3/2; 20% limestone, >15%>2cm; stop for stone

184 SE 94200 09200; 56m; level; barley

30cm; MCL; 10YR3/2/ 20% hard limestone, >15%>2cm; stop for stone

185 SE 94300 09200; 52m; level; barley

30cm; MCL; 10YR3/2; 20% limestone; >15%>2cm

40cm; MCL; 10YR6/2; 40% limestone; stop for stone

186 SE 94400 09100; 59m; level; barley

30cm; MSL; 10YR4/4; 10% limestone

60cm; LMS; 10YR5/6/ 10% limestone

80+; C; 10YR5/1; 5% limestone

187 SE 94500 09210; 56m; level; barley

30cm; MSL; 7.5YR3/2; 10% limestone; stop for stone

188 SE 94600 09200; 55m; level; barley

30cm; MSL; 7.5YR3/2; 10% hard limestone; stop for stone at 30cm

189 SE 93300 09110; 21m; level; grass;

30cm; MS; 10YR4/2; 0%

40cm; MS; 10YR4/4; 0%

100cm; MS; 10YR7/1; 0%; stop at 100

190 SE 93400 09100; 22m; level; grass;

30cm; MS; 10YR4/2; 0%

40cm; MS; 10YR4/4; 0%

100cm; MS; 10YR7/1; 0%; stop at 100

191 SE 93500 09100; 25m; level; grass

30cm; MS; 10YR4/2; 0%

40cm; MS; 10YR4/4; 0%

100cm; MS; 10YR7/1; 0%; stop at 100

192 SE 93600 09100; 30m; 2deg w; barley

30cm; LMS; 7.5YR3/2; 5% hard stone

120cm; MS; 7.5YR5/4; 0%; compacted

193 SE93700 09100; 2deg W; barley

30cm; MSL; 7.5YR3/2; 2% hard stone

70cm; MSL; 7.5YR4/4; 2% hard stone

120cm; MS; 7.5YR5/4; 0%

194 SE 93800 09100; 40m; 2deg W; barley

30cm; MS; 7.5YR3/2; 0%

40cm; MS; 7.5YR4/4; 0%

120cm; MS; 7.5YR5/6; 0%

195 SE 93900 09100; 50m; 4deg w; barley

30cm; MSL; 10YR3/2; 2% hard stone

40cm; MSL; 10YR4/4; 2% hard stone

60cm; C; 10YR5/1+5/6; 0%; gley, SP

196 SE 94100 09100; 53m; level; barley

20cm; MCL; 7.5YR3/2; 20% limestone, >15%>2cm; stop for stone

197 SE 94200 09100; 56m; level; barley

30cm; MCL; 10YR3/2; 5% limestone

70+; C; 10YR6/1+5/6; 2%; gley, SP

198 SE 94300 09100; 54m; level; barley

30cm; MCL; 10YR3/2; 20% limestone; >15%>2cm

40cm; MCL; 10YR6/2; 40% limestone; stop for stone

199 SE 94400 09100; 58m; level; barley

30cm; MSL; 7.5YR3/2; 10% limestone; stop for stone

200 SE 94500 09100; 57m; level; barley

30cm; MSL; 7.5YR3/2; 10% limestone; stop for stone

201 SE 94600 09100; 59m; level; barley

30cm; LMS; 10YR3/2; 10% limestone

40cm; ZL; 10YR7/2; 40% limestone; stop for stone at 40cm

202 SE93800 09005; 45m; 2deg SW; barley

30cm; MSL; 7.5YR3/2; 2% hard stone

50cm; MSL; 7.5YR4/4; 2% hard stone

120cm; MS; 7.5YR5/4; 0%

203 SE 93900 09010; 58m; 2deg W; barley

30cm; MS; 7.5YR3/2; 0%

40cm; MS; 7.5YR4/4; 0%

120cm; MS; 7.5YR5/6; 0%

204 SE 94100 09000; 55m; level; barley

20cm; MCL; 7.5YR3/2; 20% limestone, >15%>2cm; stop for stone

205 SE 94200 09000; 54m; level; barley

20cm; MSL; 7.5YR3/2; 5% hard stone

40cm; MSL; 7.5YR4/4; 10% hard stone; stop for stone

206 SE 94300 09000; 52m; level; barley

30cm; MSL; 7.5YR3/2; 10% hard stone

65cm; LMS; 7.5YR5/4; 10% hard stone; stop for stone

207 SE 94400 09000; 59m; level; barley

30cm; LMS; 10YR4/2; 5% limestone

40cm; MS; 10YR4/4; 0%

120cm; MS; 10YR5/6; 0%

208 SE 94500 09000; 57m; level; barley

30cm; MS; 10YR4/2; 0%

40cm; MS; 10YR4/4; 0%

120cm; MS; 10YR5/6; 0%

Inspection pit at 208, Subsoil from 30cm depth, MS texture, weakly developed coarse granular structure, friable, low packing density, no plates from compaction visible

Inspection pit at 179, Upper subsoil from 30cm depth, Heavy Silty Clay Loam, moderately developed very coarse angular blocky, moderately firm, high packing density, confirms gley and slowly permeable from immediately below topsoil

Inspection pit at 8. Confirms presence of predominantly stone layer with a clayey matrix from 30cm depth.

Additional sample points at SE 94600 10700, and SE 94700 10700 – both limited to Grade 3b by topsoil stone content.

Glossary

Soil textures

- C – Clay
- MCL – Medium Clay Loam
- HCL – Heavy Clay Loam
- MZCL – Medium silty Clay Loam
- HZCL – Heavy Silty Clay Loam
- ZL – Silt Loam
- MSL – Medium Sandy Loam
- LMS – Loamy Medium Sand
- MS – Medium Sand

Colours given in Munsell notation eg 10YR3/2

Gley – colour contrast evidence for prolonged waterlogging

SP – Slowly Permeable horizon