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12/90

STATEMENT OF PHYSICAL CHARACTERISTICS FOR LAND AT HIGH CROSS, RUGBY

Three distinct soil units have been delimited which will require separate handling if the site is worked for gravel.

Unit 1

Unit 1 covers most of the site and typically consists of slightly stony, dark yellowish brown (10YR4/4) sandy loam over slightly to moderately stony reddish yellow 7.5YR5/8 sandy loam or loamy sand. Below 60 cm subsoils vary from reddish yellow sand to clay loam, in a fairly random pattern across the site. These soils form into Wetness Class I or II. The soils have a weak coarse subangular blocky structure to 60 cm and below this depth the structure varies with the texture of the soil. The profile is moderately porous in the topsoil and very porous in the upper subsoil. Porosity in the lower subsoil varies with texture.

Roots are visible to the bottom of the pit. The soils are slightly stony (5-15%) in the topsoil and slightly to moderately stony below. Most of the soils are small and medium rounded quartzite or angular flint.

Unit 2

This unit is mapped over the sides of the valley in the East, to include slightly stony sandy clay loam soils which overlie sandy clay loam or clay loam, red marl occurs at depth in some profiles.

Unit 3

Unit 3 is mapped over the valley bottom to include almost stoneless, dark brown (10YR3/3) clay loams which overlie heavy clay loams at about 23 cm. Their subsoils vary from brown (10YR5/3) clay to dark yellowish brown (10YR54) sandy clay loam. Soil structure varies from medium sized, moderately formed, subangular blocky in the topsoil to weak coarse subangular blocky below 35 cm and very coarse prismatic below 50 cm. These soils fall into Wetness Class IV having a slowly permeable layer at 35 cm.

Summary of soil iunits

Unit	Depth	Texture	Stone percentage
1	30 cm	Sandy loam	5-15
	60	Sandy loam/loamy sand	5-25
	100	Loamy sand to clay loam	Very variable
2	30	Sandy clay loam	5-15
	55	Sandy clay loam	5-20
	100	Sandy clay loam to clay loam	Very variable
3	25	Clay loam	Few
	50	Heavy clay loam	Few
	100	Clay to sandy clay loam	Few

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Your reference

Mr D Howatson
SPIO
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Our reference
4FCS/RPG/6820 12/90
Date
11 June 1990

Dear David

HIGH CROSS RUGBY

I visited the High Cross site on the 7 June 1990 to collect the extra data required to draw up a Soil Resource Map, and confirm the ALC grades, using the Revised system.

The information was collected in far from perfect conditions, which prevented much pit digging (hard ground and standing crops), so I have been unable to check the boundaries of each ALC grade but rather have checked that the soils are still eligible for the grade in which they are placed.

ALC

Most of the site will retain its original grade but much of the land on the valley sides in the south, which was on the limit of Sub-grade 3a under the old system would be graded as Sub grade 3b under the revised system, due to a small alteration in the gradient cut offs. The rough proportion of land in each grade is as follows using the revised system:

Proportion of land in each grade	%
Grade 2	59
Grade 3a	22
Grade 3b	19
Total	100

SOIL RESOURCES

From the information I have available, I have delimited 3 soil units. I have drawn up a soil resource map for your information and enclose 4 copies. The enclosed paper gives a brief description of the soil units.

100 years

I hope you find this information sufficient for your needs. If you wish to discuss I shall be back from leave on the 27 June.

Yours sincerely

Rosemary Peel

enc.