

SITE NAME	PROFILE NUMBER	SLOPE AND ASPECT	LAND USE	Av Rainfall :- ATO :- FC Days :- 169 Climatic grade:- 1	PARENT MARIAL
Old Sarum Airfield Salisbury Urban Area LP	1	Level	Cereals		Chalk

Horizon Number	Lowest Av Depth	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots Abundance Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and Form
Topsoil	0-21	10YR43	MZCL	2% (2-6 cm; flint; visual)	None							None	Clear
Sub 1	21-27	10YR54	HCL	10% (2-6 cm; flint and chalk; visual)	None			Assumed good (Too thin and stony)				None	Distinct At common level around pit sides
Parent 1	27-53	Soft white chalk. signs of slight discolouration (10YR54) of edges of chalk units; appears compact in profile but may be broken apart by knife											
Parent 2	53-75+	White chalk; very compact											
										Few			
										No roots observed (not even roots from previous crops)			

Depth to Slowly Permeable Horizon :-	No evidence of Soil Wetness	Available Water	Wheat :- (Stopping AP at 53 cm) 76 mm	Final ALC Grade :-	38
Wetness Class :-	I	Moisture Deficit	Wheat :- 107 mm	Main Limiting Factor(s) :-	Droughtiness, determined by soil depth and rooting depth; Roots would need to penetrate to at least 70 cm before becoming 3A.
Wetness Grade :-	1	Moisture Balance	Wheat :- -31 mm	Remarks :-	Poor time of year (March) to observe penetration of chalk
RPG0023/WJC		Droughtiness Grade	:- 38		

SITE NAME	PROFILE NUMBER	SLOPE AND ASPECT	LAND USE	Av Rainfall :- ATO :- FC Days :- 169 Climatic grade:- 1	PARENT MARIAL Chalk
Sarum Airfield Salisbury Urban Area Local Plan	2	Level	Grass		

Horizon Number	Lowest Av Depth	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots Abundance Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and Form	
Topsoil	0-24	10YR52	MZCL	(0-5 cm: free) 20% sst (flint, sieve) 2% vsst (flint, visual)	None					Common Straight penetration		None	Gradual colour change	
Subsoil	24-37 (soil penetrates deeper in cracks in chalk)	10YR54	HZCL	24-27: ditto 27-37: transitional layer with 50% chalk	None			Assumed good		Common		None	Transitional from 27 cm	
Chalk	37-55	Slight soil staining and weathering of outer chalk units compact - difficult to penetrate by spade									Very few observed			
Chalk	55-60+	Very white; little weathering; no soil staining, very compact; no roots observed penetrating this layer												

Depth to Slowly Permeable Horizon :- None present
Not gleyed

Wetness Class :- I

Wetness Grade :- 1

RPG0023/WJC

Available Water Wheat :- 75 mm (stopping AP at 55 cm)

Potatoes :- 77 mm

Moisture Deficit Wheat :- 107 mm

Potatoes :- 99 mm

Moisture Balance Wheat :- -32 mm

Potatoes :- -22 mm

Droughtiness Grade :- 3B

Final ALC Grade :- 3B

Main Limiting Factor(s) :- Droughtiness
(and Topsoil Stones*)

Remarks :- * The pit is not representative from the point of view of topsoil stone content. Most areas are well below 15% sst. Roots would have to penetrate to over 70 cm to allow a 3A grade

SITE NAME	PROFILE NUMBER	SLOPE AND ASPECT	LAND USE	Av Rainfall :- ATO :- FC Days :- 169 Climatic grade:- 1	PARENT MARIAL
Old Sarum Airfield Salisbury Urban Area Local Plan	3	Level	Grass		Chalk

Horizon Number	Lowest Av Depth	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots Abundance Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and Form
Topsoil	0-22	10YR42	MCL	2% sst (Chalk, flint; visual)	None					V Common		None	Slight colour change
Subsoil	22-35	10YR63	HZCL	25% (chalk, visual)	None	Difficult to obtain structural units due to high stone content (possibly weak MSAB to FSAB)		Assumed good		Common		None	
Chalk	35-70+	Slight soil staining and very few roots to 40 cm; no roots evident below Distinct increase in compactness of chalk below 55 cm											

Depth to Slowly Permeable Horizon :- soil wetness

Wetness Class :- I

Wetness Grade :- 1

RPG0023/WJC

Available Water Wheat :- 81 mm (stopping AP at 55 cm)

Potatoes :-

Moisture Deficit Wheat :- 107 mm

Potatoes :-

Moisture Balance Wheat :- -26 mm

Potatoes :-

Droughtiness Grade :- 3B

Final ALC Grade :- 3B

Main Limiting Factor(s) :- Droughtiness

Remarks :-

Roots would need to be able to penetrate below 66 cm before going into 3A

SITE NAME Old Sarum Airfield Salisbury Urban Area Local Plan	PROFILE NUMBER 4	SLOPE AND ASPECT 3° SW (centre of minor linear depression feature)	LAND USE Winter Cereals	Av Rainfall :- ATO :- FC Days :- 169 Climatic grade:- I	PARENT MARIAL Chalk
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Horizon Number	Lowest Av Depth	Matrix and Ped Face Colours	Texture	Stoniness: Size, Shape, Type, and Field Method	Mottling Abundance, Contrast Size and Colour	Structure: Development Size and Shape	Pores and Fissures	Structural Condition	Consistence	Roots Abundance Size and Nature	Calcium Carbonate Content	Mangan Concs etc	Horizon Boundary: Distinctness and Form
Topsoil	0-20	10YR43	MZCL	2% sst (flint, visual)	None					Common		None	Distinct sharp
Sub 1	20-56	10YR44	MZCL	2% sst (flint, visual)	None	Weak MSAB (breaking easily to FSAB)	+ 0.5%	Good	Friable	Common		None	Distinct sharp
Sub 2	56-76	10YR44	MZCL	30% flint (visual)	None	Presumed similar to Sub 1 (difficult to obtain structural units due to high stone content: soil not compacted between stones)				Common		None	Distinct sharp
Chalk	78-85	Not white; showing clear signs of weathering but no roots observed - these stop at the base of Sub 2											
Pit dug to 85 cm; augering and digging to 90 cm - Impenetrable below													

Depth to Slowly Permeable Horizon :- No evidence of soil wetness

Wetness Class :- I

Wetness Grade :- 1

RPG0023/WJC

Available Water Wheat :- 133 mm (stopping AP at 90 cm)

Potatoes :-

Moisture Deficit Wheat :- 107 mm

Potatoes :-

Moisture Balance Wheat :- +26 mm

Potatoes :-

Droughtiness Grade :- 2

Final ALC Grade :- 2

Main Limiting Factor(s) :- Droughtiness

Remarks :-

Depth to the chalk varies along this depression; shallower elsewhere. Topsoil stones locally + 10%