

County Hall, Martineau Lane Norwich, Norfolk **NR1 2SG** Tel: 01603 578389

**Community & Environmental Services** Norfolk County Council **County Hall** Martineau Lane Norwich NR1 2SG

Enc. Site location plan Trialpit location plan **Trialpit** logs

Your Ref: FUL/2023/0005 Date: 12/05/2023

My Ref: 104242 Tel No.: Email:

07789272067

# Sheringham HWRC Holt Road, Land Classification Report

The objective of this letter is to determine the Agricultural Land Classification (MAFF October 1988) of the above site.

#### Site Location

The site is located on land north of the eastern end of the access road to Sheringham Household Waste Recycling Centre (HWRC) on the A148 Holt Road, Sheringham, Norfolk (OSGR 616280 / 341026). The site area is agricultural land.

#### Proposed site use

It is proposed to construct a new Household Waste Recycling Centre.

#### Site description

The site is approximately 0.4 hectares in area. The site is approximately 90.0m AOD and relatively flat with a slight slope from north west to south east. A soil bund is located along the south and western boundaries.



View looking west of the site

Management of the second second

View looking east of the site

#### <u>Geology</u>

The site is underlain by **the Britions Lane Sand and Gravel** which consists of horizontal, massive and low angle planar cross-bedded gravels and cobble gravels with thin seams of horizontal and rippled sand. The lithology has a distinctive high flint content (c.85-89%) of which the majority is of non-chatter marked variety (c.78-85%). The gravels also contain a wide range of far-travelled crystalline erratics including rocks of British and Scandinavian provenance.

The **Wroxham Crag Formation** comprises of a sheet of interbedded gravels, sands, silts and clays. The gravels are dominated by flint (up to c.80%) and by quartz and quartzite (up to c.60%), with far-travelled minor lithogies including Carboniferous chert, Rhaxella chert, Greensand chert, Spilsby Sandstone and felsic volcanic rocks from North Wales. The deposits are interpreted as estuarine and near-shore marine.

#### Site Investigation

On 21<sup>st</sup> April 2023 Mr I Brown of Norfolk Partnership Laboratory attended site and excavated five machine dug trial pits across the site. Samples were taken from these trialpits for further analysis. The trialpits were carried out at locations that have not been stripped or reduced.

#### <u>ALS1</u>

GL – 0.30m Brown sandy, silty TOPSOIL.

0.30m – 0.70m Light brown and orangey brown, gravelly, silty, fine to medium SAND. Gravel is up to cobble sized, sub-angular to rounded flint.





# <u>ALS2</u>

GL – 0.25m Brown silty TOPSOIL.

0.25m – 0.45m Orangey brown slightly gravelly, fine to medium SAND. Gravel is fine to coarse, sub-angular to sub-rounded flint.



ALS2

# <u>ALS 3</u>

GL - 0.30m Dark brown silty TOPSOIL.

0.30m - 0.50m Brown slightly gravelly, fine to medium SAND. Gravel is fine to coarse, sub-angular to sub-rounded flint.





#### <u>ALS4</u>

# GL – 0.25m Brown silty TOPSOIL.

0.25m - 0.50m Orangey brown silty, slightly gravelly, fine to medium SAND. Gravel is fine to coarse flint.



ALS4

<u>ALS5</u>

GL - 0.30m Brown silty TOPSOIL.

0.30m – 0.40m Orangey brown, silty, slightly gravelly, fine to medium SAND. Gravel is fine to coarse, sub-angular to sub-rounded flint.



ALS5

No groundwater was encountered during this investigation.

Further detail can be seen on the trialpit logs enclosed.

The investigation has shown that positive Topsoil material was identified. The Agricultural Land Classification (ALC) states "the term 'topsoil' refers to true topsoil material which developed originally at the top of a soil profile and is characteristically darker in colour and has a higher organic matter content than subsoil material. The term 'top 25 cm' is used to refer to the uppermost 25 cm of the soil profile which defines, for ALC purposes, the depth zone within which the soil is most frequently cultivated.

It is generally assumed in the soil related assessments that natural topsoil is in situ. If the land has been disturbed and there is little or no topsoil, this may be an additional limitation which needs to be taken into account when grading the land."

Below are listed the six classifications of agricultural land:

# Grade 1 – excellent quality agricultural land.

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crop can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

# Grade 2 – very good quality agricultural land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

#### Grade 3 - good to moderate quality agricultural land

Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown, yields are generally lower or more variable than on land in Grades 1 and 2.

#### Subgrade 3a - good quality agricultural land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

#### Subgrade 3b - moderate quality agricultural land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

# Grade 4 - poor quality agricultural land

Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

# Grade 5 - very poor quality agricultural land

Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

### **Climatic Limitations**

Climate has a major, and in places overriding, influence on land quality by affecting both the range of potential agricultural uses and the cost and level of production. Its most fundamental influence is on the potential for plant growth by determining the energy available for photosynthesis and water supply to plant roots.

The main parameters used in assessment of the climatic limitations are average annual rainfall (AAR), as a measure of overall wetness; and accumulated temperature, as a measure of the relative warmth of locality. For the climatic assessment, accumulated temperature is calculated, using an established algorithm (Meteorological Office, 1969), for the period January to June (AT0); this being the growth period for most crops The data used for ALC is taken from the following report:

• Climatological Data for Agricultural Land Classification, by the Met Office. January 1989.

Sample ref	AAR (mm)	AT0 (Day °C)	ALC Grade
ALS1	630	2451	1
ALS2	630	2451	1
ALS3	630	2451	1
ALS4	630	2451	1
ALS5	630	2451	1

Given the location of the site where the temperature is warmer and there is less rainfall than other parts England, the site can be given an ALC Grade of 1.

Looking at the 1:250 000 Series Agricultural Land Classification map, the site lies within an area of other land primarily in non-agricultural use.

#### **Gradient**

Gradient has a significant effect on mechanised farm operations since most conventional agricultural machinery performs best on level ground. The site is relatively flat and awarded a Grade 1.

The micro-relief can severely limit the use of agricultural machinery and can affect the final ALC Grade. However, the site appeared to be of generally level and showed no complex changes of slope angle and direction over short distances, or the presence of boulders or rock outcrops. Therefore, micro-relief does not affect the above final ALC Grade.

# Flood Risk

The occurrence of flooding is strongly influenced by topography, but the extent, duration, frequency and timing can be difficult to establish precisely. The risk of flooding may be significant in affecting the choice of crops to be grown, because at certain times of the year it can have a detrimental effect on yield and may give rise to soil management problems. Information on flooding at a local scale is often fragmentary and the assessment may have to be based on local knowledge, together with any information or advice which can be obtained from Water Authorities. Most weight should be given to the predicted long-term risk, or the return periods used in the design of flood protection schemes, rather than to the average incidence of flooding in recent years, which may have been influenced by atypical climatic conditions.

The site is not located within a flood zone and there is only limited potential for groundwater flooding to occur.

The risk of surface water flooding is generally considered low due to the local geology of the area.

Therefore, based on the information above, the site can be given an ALC Grade of 1.

#### Soil depth

Soil depth is an important factor in determining the available water capacity of a soil. Shallowness affects cropping in other ways, notably by influencing the range and type of cultivations which can be carried out, but also by restricting nutrient uptake and root growth. Therefore, it is necessary to specify minimum soil depth requirements for the grades and subgrades. The table below shows the ALC Grades for each field based on soil depth.

Sample ref	Topsoil Depth (m)	ALC Grade
ALS1	0.30	3a
ALS2	0.25	3b
ALS3	0.30	3a
ALS4	0.25	3b
ALS5	0.30	3a

# Continuation Sheringham Holt Road HWRC 104242 Stoniness

The amount of stones has an effect on cultivation, harvesting and crop growth and to cause a reduction in the available water capacity of a soil.

A high stone content can increase production costs by causing extra wear and tear to implements and tyres. Crop quality may also be reduced in stony soil.

The degree of limitation imposed by stones depends on their quantity, size, shape and hardness. The grade on stone content is based upon the percentage of stones that will not pass-through sieves with 2cm or 6cm square mesh and are expressed in terms of the percentage of total volume for the top 25cm of the soil.

A particle size distribution test was carried out on a sample of the surface 250mm from each of the trial pits. The results showed the following stoniness.

Sample ref	% stones larger 2cm	% stones larger 6cm	Classification
ALS1	53	8	5
ALS2	55	39	5
ALS3	35	0	3b
ALS4	30	0	3b
ALS5	42	0	4

Based upon the stone content within the top 25cm of topsoil, all of the samples contain over 15% of stones that are larger than a 2cm sieve therefore, the highest classification on the site is 3b. However, due to more stones being retained on a 2cm sieve for ALS1 and ALS2, ALS5 the following classifications have been given: 5, 5 and 4 respectively

A soil wetness limitation exists where the soil water regime adversely affects plant growth or imposes restriction on cultivations or grazing by livestock. Excessive soil wetness adversely affects seed germination and survival, partly by a reduction in soil temperature and partly because of anaerobism. It also inhibits the development of a good root system and can, in extreme cases, lead to plant death. Soil wetness also influences the sensitivity of the soil to structural damage and is therefore a major factor in determining the number of days when the soil is in a suitable condition for cultivation, trafficking by machinery or grazing by livestock.

For ALC purposes, the soil wetness assessment takes account of:

- The climatic regime
- The soil water regime
- The texture of the top 25cm of soil

The influence of climate on soil wetness is assessed by reference to median field capacity days (FCD). FCD ranges are specified within which similar soils are expected to have similar degrees of wetness limitation.

Soil wetness regime is defined in terms of the average duration of waterlogging at specified depths in the soil profile. Soil texture classes are divided into four groups according to ease of cultivation and susceptibility to damage by grazing animals.

Sample ref	Wetness Class	Texture of the top 25cm	Field Capacity Days	ALC Grade
ALS1	II	LS	175-225	2
ALS2	II	LS	175-225	2
ALS3	II	LS	175-225	2
ALS4	II	LS	175-225	2
ALS5	II	LS	175-225	2

The assigned 'Soil Wetness Class' for each field has been based upon interpretation of the logged soils and Table 6 in the Agricultural Land Classification, 1988.

To achieve full yield potential, a crop requires an adequate supply of soil moisture throughout the growing season. Droughtiness is a significant limitation to crop growth in areas with relatively low rainfall or high evapotranspiration, or where the soil holds only small reserves of moisture available to plant roots.

Soil droughtiness requires the calculation of the 'crop-adjusted available water capacity' (AP) for both wheat and potatoes, as these crops are widely grown and, in terms of their susceptibility to drought are representative of a broad range of crops. AP is based upon the 'Total Available Water' and 'Easily Available Water' of the different topsoil and subsoil levels. The Moisture deficit (MD) is also needed, which is part of the 1989 Met Office data set. The AP and MD can be used to calculate the Moisture Balance (MB) which is used to define the ALC Grade.

		Wheat					
Sample	AP	MD	MB	AP	MD	MB	ALC
ref	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	Grade
ASL1	136.92	116.54	20.38	76.92	111.71	-34.79	3b
ASL2	89.55	116.54	-26.99	57.05	111.71	-54.66	3b
ALS3	105.06	116.54	-11.48	72.56	111.71	-39.15	3b
ALS4	102.75	116.54	-13.79	70.25	111.71	-41.46	3b
ALS5	99.78	116.54	-16.76	67.28	111.71	-44.43	3b

After the consideration of the site investigation and in particular the stoniness testing the final Land Classification ranges from Grade 3b to Grade 5. It is therefore deemed that no further testing is required. The results are tabulated below

Sample		ALC Grade According to:												
Ref	Climate	Gradient	Flood	Soil	Stoniness	Soil	Soil	Grade						
			Risk	Depth		Wetness	Droughtiness							
1	1	1	1	3a	5	2	3b	5						
2	1	1	1	3b	5	2	3b	5						
3	1	1	1	3a	3b	2	3b	3b						
4	1	1	1	3b	3b	2	3b	3b						
5	1	1	1	3a	4	2	3b	4						

#### Site Classification

It can be concluded that the site area can be classified in accordance with 1988 MAFF publication Agricultural Land Classification of England and Wales, as ranging from Grade 3b to Grade 5.

#### Subgrade 3b - moderate quality agricultural land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

#### Grade 5 - very poor quality agricultural land

Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

If Norfolk Partnership Laboratory can be of any further assistance with this or any other project, please do not hesitate to contact me.

Yours sincerely



I Brown

Head of Laboratory Services



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					104242-001							
	1	SURVEYED BY	OS	04/23	PROJECT TITLE		٦					
		DESIGNED BY	JP	04/23	Sheringham H	WRC Holt Road ALS						
		DRAWN BY	JP	04/23	Site In	vestigation						
			<u>.</u>	0 1120	SCALE	FILE No.						
		CHECKED BY	IDB	04/23	1: 5000 @A3	104242	J					
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#### TRIAL PIT LOG

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Scher	ne		Sheringham HWRC Holt Road ALS	J	ob l	No.	10424	2	Trial	Pit No		ALS	1			
Carrie	ed out	for	Norfolk County Council	D	ate	Starte	d 21/0	4/2023	Date	Finished 21/04/20				23		
Dimer	nsions	s:	0.50m x 0.70m	Ţ	уре	of Rig	Hitad	chi 360	<b>I</b>					Logge	d by	IDB
Rema	rks:			D	ept	h (m)	0.70		Grou (m A	nd Lev	vel			Draw	n by	JP
				С	0-0	rds	6163	321 - 341	031	00)				Check	ed by	IDB
Backfill	Water	Casing	Description	Lege	end	Depth	Scale	Sa	mple	Field		I	abora	tory Tes	ts	
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			TOPSO L				-	$ $ $\downarrow$	1							
			Light brown and orangey brown, gravelly, silty, fine to medium			0 30	-	♠ ↓								
			SAND. Gravel is up to cobble size, sub-angular to rounded flint. BRITONS LANE SAND AND GRAVEL	×××	××××		-		2							
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#### TRIAL PIT LOG

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Schen	ne		Sheringham HWRC Holt Road ALS	Jo	b No.	10424	2	Trial Pit No. ALS2							
Carrie	d out	for	Norfolk County Council	Da	ate Starte	d 21/0	4/2023	Date	Date Finished			ed 21/04/2023			
Dimer	nsions	S:	0.50m x 0.70m	Ту	pe of Rig	Hitad	chi 360						Logge	d by	IDB
Rema	rks:			De	epth (m)	0.45		Grou (m A0	nd Lev OD)	vel			Draw	n by	JP
				Co	o-ords	6163	314 - 3410	005					Check	ed by	IDB
Backfill	Water	Casing	Description	Legen	Depth	Scale	Sam	ıple	Field		I	abora	tory Tes	ts	
		3		3	(m)		Туре	No.	lests	MC%	LL	PL	MPI	Org.	CBR
			Brown silty TOPSO L. TOPSO L			-		1							
			Orangey brown slightly gravelly, fine to medium SAND. Gravel is		0 25	-	•								
			BRITONS LANE SAND AND GRAVEL		0.45	-									
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#### TRIAL PIT LOG

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Scher	ne		Sheringham HWRC Holt Road ALS	Jo	b No.	10424	2	Trial	Pit No	-	ALS:	3			
Carrie	ed out	for	Norfolk County Council	Da	ite Starte	d 21/0	4/2023	Date	Finish	ned	21/0	4/202	23		
Dimer	nsion	S:	0.50m x 0.70m	Ту	pe of Rig	Hita	chi 360						Logge	d by	IDB
Rema	irks:			De	epth (m)	0.30	1	Grou (m A	nd Lev	vel			Draw	n by	JP
				Co	o-ords	6162	288 - 3410	029	00)				Check	ed by	IDB
Backfill	Water	Casing	Description	Legen	d Depth	Scale	San	nple	Field		l	Labora	tory Tes	ts	
					(m)		Туре	No.	lests	MC%	LL	PL	MPI	Org.	CBR
			Brown slity TOPSO L. TOPSO L Brown slightly gravelly, fine to medium SAND. Gravel is fine to coarse, sub-angular to sub-rounded flint. BRITONS LANE SAND AND GRAVEL		0 30	- - - - - - - - - - - - - - - - - - -		1							
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#### TRIAL PIT LOG

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Scher	ne		Sheringham HWRC Holt Road ALS		Job I	No.	10424	2	Trial	Pit No	•	ALS4	4			
Carrie	ed out	for	Norfolk County Council		Date	Started	d 21/0	4/2023	Date	Finish	ned	21/04	4/202	23		
Dimer	nsions	s:	0.50m x 0.70m		Туре	of Rig	Hitad	chi 360						Logge	d by	IDB
Rema	rks:			I	Dept	h (m)	0.50		Grou (m A0	nd Lev DD)	vel			Drawı	ו by	JP
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			Brown silty TOPSO L. TOPSO L Orangey brown silty, slightly gravelly, fine to medium SAND. Gravel is fine to coarse flint. BRITONS LANE SAND AND GRAVEL			0 25 0 50	-	↓ ↓	1							
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#### TRIAL PIT LOG

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Scher	ne		Sheringham HWRC Holt Road ALS	Job	No.	10424	2	Trial I	Pit No	•	ALS	5			
Carrie	ed out	for	Norfolk County Council	Dat	e Starteo	d 21/0	4/2023	Date	Finish	ed	21/04	4/202	023		
Dimer	nsions	3:	0.50m x 0.70m	Тур	e of Rig	Hita	chi 360						Logge	d by	IDB
Rema	irks:			Dep	oth (m)	0.40		Grou (m A0	nd Lev	/el			Draw	n by	JP
				Co-	ords	6162	255 - 3410	)27	,				Checke	ed by	IDB
Backfill	Water	Casing	Description	Legend	Depth	Scale	Sam	ple	Field		L	abora	ory Tes	ts	
				~	(11)		Туре	No.	Tesis	MC%	LL	PL	MPI	Org.	CBR
			TOPSO L			-		1							
			Orangey brown, silty, slightly gravelly, fine to medium SAND. Gravel is fine to coarse, sub-angular to sub-rounded flint. RITONS LANE SAND AND GRAVEL		0 30	-									
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Our reference No. NNPL2023042615-611 Our Project No. 104242 Your Sample Ref. 2615 Your Order No. Date Tested 28 Apr 2023 Date Report Issued 04 May 2023

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If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

Sieving		Specification for Highway	Sample Proportions	
Particle Size		Works Classification	BOULDERS	0
mm	% Passing	Table 6/2	COBBLES	8
125	100	This material complies with the	Coarse GRAVEL	31
90	100	following material classes 1A,	Medium GRAVEL	8
75	100	6E/6R, 6F1, 6I, 6M, 6N.	Fine GRAVEL	5
63	92		Coarse SAND	10
37.5	76		Medium SAND	22
20	61		Fine SAND	9
14	58		Silt & Clay	6
10	55			
6.3	52		Grading Analysis	
5	49	Please be aware that we only report	D100	63
2	47	compliance with specifications using	D60	18.657
1.18	46	'simple acceptance' as a guide as the	D10	0.132
0.600	37	specifications for the material as well	Uniformity Coefficient <sup>!</sup>	141
0.425	30	as the methodology for testing are		
0.300	22	well established and take into	Description	
0.212	15	account uncertainty in their	Dark brown, silty fine to coasre SAND and	
0.063 6		formulation.	GRAVEL with rootlets.(Topsoil). Gravel is a	
			to subrounded fine to coa	rse with rare cobble size
			flint.	
		Mainture contant 0/ 0.1		

Moisture content % 9.1 (BS1377-Part 2, 1990-Withdrawn)

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Test Code = 611

Jan Eller



Our reference No. NNPL2023042614-611 Our Project No. 104242 Your Sample Ref. 2614 Your Order No. Date Tested 27 Apr 2023 Date Report Issued 04 May 2023

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Sieving		Specification for Highway	Sample Proportions	
Particle Size		Works Classification	BOULDERS	0
mm	% Passing	Table 6/2	COBBLES	17
125	100	This material complies with the	Coarse GRAVEL	19
90	100	following material classes 1A, 6A,	Medium GRAVEL	4
75	91	6E/6R, 6I.	Fine GRAVEL	10
63	83		Coarse SAND	16
37.5	68		Medium SAND	21
20	64		Fine SAND	13
14	62		Silt & Clay	0
10	60			
6.3	60		Grading Analysis	
5	59	Please be aware that we only report	D100	75
2	50	compliance with specifications using	D60	6.860
1.18	47	'simple acceptance' as a guide as the	D10	0.174
0.600	34	specifications for the material as well	Uniformity Coefficient	39
0.425	27	as the methodology for testing are		
0.300	19	well established and take into	Description	
0.212	13	account uncertainty in their	Orangey brown silty sandy clay flint gravel up to	
0.063	0	formulation.	cobble size.	
		Moisture content % 9.8		

(BS1377-Part 2, 1990-Withdrawn)

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Our reference No. NNPL2023042610-611 Our Project No. 104242 Your Sample Ref. 2610 Your Order No. Date Tested 26 Apr 2023 Date Report Issued 04 May 2023

Page 1 of 1



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Sieving		Specification for Highway	Sample Proportions	
Particle Size	04 D	Works Classification	BOULDERS	0
mm % Passing	Table 6/2	COBBLES	39	
125	100	This material complies with the	Coarse GRAVEL	10
90	61	following material classes 1A.	Medium GRAVEL	4
75	61		Fine GRAVEL	1
63	61		Coarse SAND	7
37.5	54		Medium SAND	22
20	50		Fine SAND	10
14	48		Silt & Clay	6
10	48			
6.3	46		Grading Analysis	
5	46	Please be aware that we only report	D100	90
2	45	compliance with specifications using	D60	60.656
1.18	44	'simple acceptance' as a guide as the	D10	0.124
0.600	38	specifications for the material as well	Uniformity Coefficient	490
0.425	31	as the methodology for testing are		
0.300	23	well established and take into	Description	
0.212	16	account uncertainty in their	Dark brown, silty, gravelly f	ine to coarse SAND
0.063	6	formulation.	with occasional Ifint cobbles. Gravel is angular subrounded fine to coarse flint.	

#### Moisture content % 17

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Test Code = 611

Jim Elliott (Lead Technical Support Tech.)

Jan Eller



Our reference No. NNPL2023042612-611 Our Project No. 104242 Your Sample Ref. 2612 Your Order No. Date Tested 27 Apr 2023 Date Report Issued 04 May 2023

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If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

Sieving		Specification for Highway	Sample Proportions	
Particle Size		Works Classification	BOULDERS	0
mm	% Passing	Table 6/2	COBBLES	0
125	100	This material complies with the	Coarse GRAVEL	5
90	100	following material classes 1B,	Medium GRAVEL	18
75	100	6E/6R, 6F1, 6J, 6M.	Fine GRAVEL	11
63	100		Coarse SAND	16
37.5	100		Medium SAND	31
20	95		Fine SAND	18
14	90		Silt & Clay	0
10	89			
6.3	76		Grading Analysis	
5	74	Please be aware that we only report	D100	20
2	65	compliance with specifications using	D60	1.334
1.18	59	'simple acceptance' as a guide as the	D10	0.144
0.600	49	specifications for the material as well	Uniformity Coefficient	9
0.425	42	as the methodology for testing are	· · · · · · · · · · · · · · · · · · ·	
0.300	30	well established and take into	Description	
0.212	18	account uncertainty in their	Dark brown very silty sand,	flint gravel topsoil.
0.063	0	formulation.		
		Moisture content % 12		

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Jim Elliott (Lead Technical Support Tech.)

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Our reference No. NNPL2023042611-611 Our Project No. 104242 Your Sample Ref. 2611 Your Order No. Date Tested 26 Apr 2023 Date Report Issued 04 May 2023

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If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

Sieving		Specification for Highway	Sample Proportions		
Particle Size	cle Size	Works Classification	BOULDERS	0	
mm	% Passing	Table 6/2	COBBLES	0	
125	100	This material complies with the	Coarse GRAVEL	25	
90	100	following material classes 1B,	Medium GRAVEL	3	
75	100	6E/6R, 6J, 6M.	Fine GRAVEL	2	
63	100		Coarse SAND	7	
37.5	82		Medium SAND	34	
20	75		Fine SAND	21	
14	74		Silt & Clay	8	
10	73				
6.3	72		Grading A	ading Analysis	
5	72	Please be aware that we only report	D100	38	
2	70	compliance with specifications using	D60	0.509	
1.18	69	'simple acceptance' as a guide as the	D10	0.075	
0.600	63	specifications for the material as well	Uniformity Coefficient	7	
0.425	57	as the methodology for testing are			
0.300	43	well established and take into	Description		
0.212	29	account uncertainty in their	Dark brown, silty, very gravelly fine to carse SAI		
0.063	8	formulation.	with occasional rootlets (TC	PSOIL). Gravel is	
			angular to subrounded fine to coarse flint.		
		Moisture content % 8.9			

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Test Code = 611

Jim Elliott (Lead Technical Support Tech.)

Jan Eller



Jan Eller

Community & Environmental Services FAO County Hall Martineau Lane Norwich NR1 2SG Our reference No. NNPL2023042613-611 Our Project No. 104242 Your Sample Ref. 2613 Your Order No. Date Tested 26 Apr 2023 Date Report Issued 04 May 2023

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If a sample certificate was provided, it is available for inspection. The accuracy of any information provided by third parties cannot be guaranteed. These results only relate to the sample tested.

Sieving		Specification for Highway	Sample Proportions	
Particle Size		Works Classification	BOULDERS	0
mm	% Passing	Table 6/2	COBBLES	0
125	100	This material complies with the	Coarse GRAVEL	22
90	100	following material classes 1A,	Medium GRAVEL	4
75	100	6E/6R, 6F1, 6I, 6M, 6N.	Fine GRAVEL	16
63	100		Coarse SAND	14
37.5	87		Medium SAND	21
20	78		Fine SAND	14
14	77		Silt & Clay	9
10	77		· · · ·	
6.3	74		Grading Analysis	
5	73	Please be aware that we only report	D100	38
2	58	compliance with specifications using	D60	2.361
1.18	54	'simple acceptance' as a guide as the	D10	0.071
0.600	45	specifications for the material as well	Uniformity Coefficient	33
0.425	39	as the methodology for testing are		
0.300	31	well established and take into	Description	
0.212	24	account uncertainty in their	Dark brown, silty, fine to c	oarse SAND and
0.063	9	formulation.	GRAVEL with rare rootlets	(TOPSOIL). Gravel is
			angular to subrounded fine to coarse flint.	
		Moisture content % 13		

Jim Elliott (Lead Technical Support Tech.)

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