

Job No: 8599/27 Our Ref: 8599/27-AA 20 September 2019

Daracon Contractors Pty Ltd 184 Adderley Street AUBURN NSW 2144 *Email: <u>SimpsonW@daracon.com.au</u>*

Attention: Mr S Wong / Mr J Letby

Dear Sirs

re: Newpark – Precinct 6, Marsden Park Elara Blvd, Marsden Park Site Classification Report

Please find herewith the results of a geotechnical investigation for the classification of proposed lots at the above site. Two hundred and forty eight (248) lots are covered in this investigation (Lot 6001 to Lot 6248).

This report contains information on surface and sub-surface conditions encountered at the site, together with an assessment of the site classifications in accordance with Australian Standard AS2870-2011 "Residential Slabs & Footings".

If you have any questions, please do not hesitate to contact the undersigned.

Yours faithfully GEOTECH TESTING PTY LTD

RAM RAVI-INDRAN Geotechnical Engineer

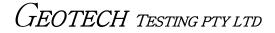


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8599/27-AA Newpark Precinct 6 - Elara Blvd, Marsden Park

1.0 INTRODUCTION

This report provides results of a geotechnical investigation for the classification of proposed lots at the Newpark Precinct 6, located on Elara Blvd, Marsden Park. The work was commissioned by Daracon Contractors Pty Ltd in a purchase order dated 31 October 2018 (Ref No Q1379-AG PO ref same as quote?) and was conducted in accordance with our fee proposal dated 13 August 2018 (Ref: ER.sf/Q1379-AG). A total of two hundred and forty eight (248) lots are covered in this report.

Site classification in accordance with AS2870-2011 is only applicable for design of footing systems for a single dwelling, house, townhouse, or similar structure that would be detached or separated by a party wall or common wall including buildings classified as Class 1 and Class 10a in the Building Code of Australia (BCA). AS2870 is not suitable for dwellings situated vertically above or below another dwelling. Therefore, a geotechnical investigation would be required for other dwellings to be classified in accordance with the BCA.

It is understood that the proposed dwellings are to be of brick veneer construction and that wall loadings are expected to be in the range of 15kN/m to 50kN/m. The maximum working load (safe bearing pressure) would be in the order of 50kPa for ground supported floor slabs and 100kPa for strip and pad footings (AS2870-2011).

2.0 FIELD WORK

Field work for the investigation was carried out between 4th and 9th of August 2019 under the full time supervision of a Geotechnical Engineer from this company and consisted of the excavation of 125 test pits (TP1 to TP125) using a 5 tonne excavator fitted with a 450mm bucket. The test pits were terminated at a depth of 1.5m or refusal on bedrock and their approximate locations are indicated on the attached Drawing No 8599/27-AA1. The brief descriptions of materials encountered in the test pits are provided in the attached Table A.

3.0 SITE CONDITIONS

3.1 Site Description

The site (Precinct 6) is connected to Elara Blvd to the north and is bounded by newly developed subdivision land on all sides. The site was originally farmland with scattered trees which are now removed. Topography of the site is generally sloping towards south-west direction. At the time of investigation, earthworks for the lots had been completed and topsoil spreading on some of the lots was underway. The site was devoid of any vegetation at the time of investigation.

3.2 Sub-Surface Conditions

Subsurface conditions encountered in the test pits are detailed in the attached Table A and summarised below in Table 1.

Test Pit	Termination Depth (m)	Topsoil (m)	Fill (m)	Natural (m)	Bedrock (m)
TP1	1.5	0.0-0.2	0.2-0.4	0.4-1.5	NE
TP2	1.5	0.0-0.2	0.2-0.3	0.3-1.5	NE
TP3	1.5	0.0-0.2	0.2-0.4	0.4-1.5	NE

Table 1: Sub-surface Conditions

Test Pit	Termination Depth (m)	Topsoil (m)	Fill (m)	Natural (m)	Bedrock (m)	
TP4	1.5	0.0-0.2	NE	0.2-1.5	NE	
TP5 1.5 0.0-0.2 0		0.2-1.5	NE	NE		
TP6	1.5	0.0-0.2	0.2-1.5	NE	NE	
TP7	1.5	0.0-0.2	NE	0.2-1.5	NE	
TP8	1.5	0.0-0.2	0.2-1.5	NE	NE	
TP9	1.5	0.0-0.2	0.2-0.3	0.3-1.5	NE	
TP10	1.5	0.2-0.2	0.2-0.3	0.3-1.5	NE	
TP11	1.5	0.0-0.2	0.2-0.4	0.4-1.5	NE	
TP12	1.5	0.0-0.2	0.2-0.9	0.9-1.5	NE	
TP13	1.5	0.0-0.2	NE	0.2-1.5	NE	
TP14	1.5	0.0-0.2	NE	0.2-1.5	NE	
TP15	1.5	0.0-0.2	NE	0.2-1.5	NE	
TP16	1.5	0.0-0.2	0.2-0.4	0.4-1.5	NE	
TP17	1.5	0.0-0.2	0.2-0.7	0.7-1.5	NE	
TP18	1.5	0.0-0.2	0.2-0.4	0.4-1.5	NE	
TP19	1.5	NE	NE	0.0-1.5	NE	
TP20	1.5	0.0-0.2	NE	0.2-1.5	NE	
TP21	1.5	NE	NE	0.0-1.5	NE	
TP22	1.5	0.0-0.2	NE	0.2-1.5	NE	
TP23	1.5	NE	0.0-0.5	0.5-1.5	NE	
TP24	1.5	0.0-0.2	0.2-0.6	0.6-1.5	NE	
TP25	1.5	0.0-0.2	0.2-0.5	0.5-1.5	NE	
TP26	1.5	0.0-0.2	NE	0.2-1.5	NE	
TP27	1.5	0.0-0.2	0.2-0.3	0.3-1.5	NE	
TP28	1.5	0.0-0.2	NE	0.2-1.5	NE	
TP29	1.5	0.0-0.2	0.2-0.3	0.3-1.5	NE	
TP30	1.5	0.0-0.2	NE	0.2-1.5	NE	
TP31	1.5	0.0-0.2	0.2-0.4	0.4-1.5	NE	
TP32	1.5	0.0-0.2	NE	0.2-1.5	NE	
TP33	1.5	0.0-0.2	NE	0.2-1.5	NE	
TP34	1.5	0.0-0.2	0.2-0.5	0.5-1.5	NE	
TP35	1.5	0.0-0.2	0.2-1.2	1.2-1.5	1.2-1.5 NE	
TP36	1.5	0.0-0.2	0.2-0.7	0.7-1.5	5 NE	
TP37	1.5	1.5 0.0-0.2 0.2-1.3 1.3-1.5 NE		NE		
TP38	1.5	0.0-0.1	0.1-1.2	1.2-1.5	NE	
TP39	1.5	NE	0.0-0.7	0.7-1.5	NE	

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Test Pit	Test Pit Termination Topsoil Depth (m) (m)		Fill (m)	Natural (m)	Bedrock (m)	
TP40	1.5	0.0-0.2	0.2-0.9	0.9-1.5	NE	
TP41	1.5	NE	NE 0.0-0.2 0.2-1.5 NE		NE	
TP42	1.5	NE	0.0-0.9	0.9-1.5	NE	
TP43	1.5	NE	0.0-1.1	1.1-1.5	NE	
TP44	1.5	NE	0.0-0.9	0.9-1.5	NE	
TP45	1.5	NE	0.0-0.8	0.8-1.5	NE	
TP46	1.5	NE	0.0-1.2	1.2-1.5	NE	
TP47	1.5	NE	0.0-0.9	0.9-1.5	NE	
TP48	1.5	NE	0.0-0.8	0.8-1.5	NE	
TP49	1.5	NE	0.0-0.8	0.8-1.5	NE	
TP50	1.5	NE	0.0-0.9	0.9-1.5	NE	
TP51	1.5	NE	0.0-0.6	0.6-1.5	NE	
TP52	1.5	NE	0.0-0.8	0.8-1.5	NE	
TP53	1.5	NE	0.0-0.8	0.8-1.5	NE	
TP54	1.5	NE	0.0-0.1	0.1-1.5	NE	
TP55	1.5	NE	0.0-0.1	0.1-1.5	NE	
TP56	1.5	NE	0.0-0.1	0.1-1.5	NE	
TP57	1.5	NE	0.0-0.2	0.2-1.5	NE	
TP58	1.5	NE	0.0-0.2	0.2-1.5	NE	
TP59	1.5	NE	0.0-0.2	0.2-1.5	NE	
TP60	1.5	NE	0.0-0.2	0.2-1.5	NE	
TP61	1.5	NE	0.0-0.2	0.2-1.5	NE	
TP62	1.5	NE	0.0-0.2	0.2-1.5	NE	
TP63	1.5	NE	0.0-0.2	0.2-1.5	NE	
TP64	1.5	NE	0.0-0.8	0.8-1.5	NE	
TP65	1.5	NE	0.0-0.2	0.2-1.5	NE	
TP66	1.5	NE	0.0-0.2	0.2-1.5	NE	
TP67	1.5	NE	0.0-0.2	0.2-1.5	NE	
TP68	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP69	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP70	1.5	NE	0.0-0.2	0.2-1.5	0.2-1.5 NE	
TP71	1.5	NE	0.0-0.3	0.3-1.5	5 NE	
TP72	1.5	NE	0.0-0.2	0.2-1.5 NE		
TP73	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP74	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP75	1.5	NE	0.0-0.3	0.3-1.5	NE	

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Test Pit	Test PitTermination Depth (m)Topsoil (m)		Fill (m)	Natural (m)	Bedrock (m)	
TP76	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP77	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP78	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP79	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP80	1.5	NE	0.0-0.6	0.6-1.5	NE	
TP81	1.5	NE	0.0-0.5	0.5-1.5	NE	
TP82	1.5	NE	0.0-0.6	0.6-1.5	NE	
TP83	1.5	NE	0.0-0.6	0.6-1.5	NE	
TP84	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP85	1.5	NE	0.0-0.5	0.5-1.5	NE	
TP86	0.4	0.0-0.3	NE	NE	0.3-0.4	
TP87	0.4	0.0-0.3	NE	NE	0.3-0.4	
TP88	0.4	0.0-0.3	NE	NE	0.3-0.4	
TP89	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP90	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP91	0.4	NE	0.0-0.3	NE	0.3-0.4	
TP92	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP93	1.5	0.0-0.3	NE	0.3-1.5	NE	
TP94	0.4	0.0-0.3	NE	NE	0.3-0.4	
TP95	1.5	NE	0.0-1.5	NE	NE	
TP96	1.5	NE	0.0-1.5	NE	NE	
TP97	1.5	NE	0.0-1.2	1.2-1.5	NE	
TP98	1.5	NE	0.0-1.2	1.2-1.5	NE	
TP99	1.5	NE	0.0-1.5	NE	NE	
TP100	1.5	NE	0.0-1.2	1.2-1.5	NE	
TP101	1.5	0.2-0.3	0.3-0.7	0.7-1.5	NE	
TP102	1.5	NE	0.0-0.5	0.5-1.5	NE	
TP103	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP104	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP105	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP106	1.5	NE	0.0-0.4	0.4-1.5	NE	
TP107	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP108	1.5	NE	0.0-0.4	0.4-1.5	NE	
TP109	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP110	1.5	NE	0.0-0.3	0.3-1.5	NE	
TP111	1.5	NE	0.0-0.3	0.3-1.5	NE	

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Test Pit	Termination Depth (m)	Topsoil (m)	Fill (m)	Natural (m)	Bedrock (m)
TP112	1.5	NE	0.0-0.3	0.3-1.5	NE
TP113	1.5	NE	0.0-0.3	0.3-1.5	NE
TP114	1.5	NE	0.0-0.3	0.3-1.5	NE
TP115	1.5	NE	0.0-0.3	0.3-1.5	NE
TP116	1.5	NE	0.0-0.3	0.3-1.5	NE
TP117	1.5	NE	0.0-0.3	0.3-1.5	NE
TP118	1.5	NE	0.0-0.3	0.3-1.5	NE
TP119	1.5	NE	0.0-0.3	0.3-1.5	NE
TP120	1.5	NE	0.0-0.3	0.3-1.5	NE
TP121	1.5	NE	0.0-0.9	0.9-1.5	NE
TP122	1.5	NE	0.0-1.2	1.2-1.5	NE
TP123	1.5	NE	0.0-1.5	NE	NE
TP124	1.5	NE	0.0-1.5	NE	NE
TP125	1.5	NE	0.0-1.5	NE	NE

NE: Not Encountered

The materials encountered in the test pits can be generalised as below:

Topsoil	Silty Clay, low plasticity, dark brown, with grass roots				
Fill	Silty Sandy Clay, low plasticity, brown				
	Silty Clay, low to medium plasticity, dark brown, traces of ironstone				
	Silty Clay, medium to high plasticity, grey and orange, with ironstone, gravel and cobbles				
	Silty Clay, medium plasticity, red and grey, with ironstone gravel				
	Silty Clay, low to medium plasticity, brown				
	Silty Clay, high plasticity, grey, with ironstone gravel				
	Silty Clay, low to medium plasticity, brown mottled grey				
	Silty Clay, high plasticity, red				
Natural	Silty CLAY, medium to high plasticity, pale grey, with ironstone gravel				
	Silty CLAY, medium to high plasticity, pale grey and pale brown				
	Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel				
	Silty CLAY, medium to high plasticity, red mottled grey, traces of ironstone				
	Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles				
	Silty CLAY, medium plasticity, grey/red, with ironstone gravel and cobbles				
	Silty Sandy CLAY, low plasticity, red, with ironstone gravel				
Bedrock	SILTSTONE, red and yellow-brown, extremely to distinctly weathered, very low to low strength				

Groundwater was not observed in the test pits during the short time that they remained open. It must be noted that fluctuations in the level of groundwater might occur due to variations in rainfall, temperature, and/or other factors not evident during investigation.

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4.0 LABORATORY TESTING

During the site investigation, ten undisturbed samples (U_{50}) and six disturbed samples were recovered for shrink/swell index and Atterberg limit tests, aimed at assessing soil reactivity at moisture changes. The tests were conducted as per relevant Australian Standards. The test certificates are attached and results are summarised below.

Test Pit	Depth (m)	Material Description	I _{ss} (%/ _p F)	LL (%)	PI (%)	LS (%)
TP2	0.5 – 0.8	(CI-CH) Silty CLAY, medium to high plasticity, pale grey and pale brown	5.5	-	-	-
TP4	1.2 – 1.4	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel	-	37	19	8.5
TP7	1.0 – 1.2	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel	-	72	52	13.5
TP13	0.2 – 0.5	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel	2.7	-	-	-
TP14	1.1 – 1.3	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles	-	47	32	8.5
TP24	0.7 – 1.0	(CI-CH) Silty CLAY, medium to high plasticity, pale grey/red, with ironstone gravel and cobbles	2.8	-	-	-
TP28	0.6 – 0.9	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel	-	86	64	18.0
TP40	0.6 – 0.9	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel	2.9	-	-	-
TP42	1.0 – 1.2	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel	-	71	50	18.5
TP45	0.7 – 1.0	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel		-	-	-
TP47	1.1 – 1.3	(CI-CH) Silty CLAY, medium to high plasticity, pale grey and pale brown, with ironstone gravel		40	26	9.5
TP59	0.4 – 0.7	(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel		-	-	-
TP62	1.2 – 1.4	(CH) Silty CLAY, high plasticity, pale grey and pale brown, with cobbles and boulders	-	75	53	19.0
TP84	0.5 – 0.8	(CH) Silty CLAY, high plasticity, grey mottled red-yellow	7.0	-	-	-
TP85	1.1 – 1.2	(CI-CH) Silty CLAY, medium to high plasticity, orange and grey-brown		44	29	10.5
TP106	0.6 – 0.9	(CI-CH) Silty CLAY, medium to high plasticity, grey and red, with ironstone gravel	1.9	-	-	-
TP109	0.7 – 0.9	(CI-CH) Silty CLAY, medium to high plasticity, red mottled grey, traces of ironstone	-	58	41	11.5
TP117	0.5 – 0.8	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone	5.1	-	-	-

Iss: Shrink/Swell Index, LL: Liquid Limit, PI: Plasticity Index, LS: Linear Shrinkage

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5.0 DISCUSSION & RECOMMENDATIONS

5.1 Assessment of Fill

Clayey fill material of considerable depth was encountered in some of the test pits across the site. Geotech Testing Pty Ltd conducted sufficient number of compaction tests during fill placement and test results are reported separately. Based on the visual inspection of the material in the test pits and compaction test results, the fill placed on the lots is classified as "Controlled".

5.2 Site Classification

Based on the above information, site classifications to AS2870-2011 are summarised in Appendix B. It should be noted that lots containing more than 400mm of clay fill (assessed as controlled fill) would originally be classified as Class P in accordance with AS2870-2011. However, based on the results of this investigation, which included laboratory testing, the lots are classified as detailed in Appendix B.

It is recommended that footings for the proposed dwellings are founded on the same stratum, below any topsoil, loose or deleterious material, to minimise the potential for differential movement. In the event that bedrock is encountered in any portion of the footing excavations, the remainder of the foundations must be supported on bedrock to ensure even bearing.

The classifications presented in Appendix B of this report are applicable to the lots at the date of conducting the investigation, being between 4^{th} and 9^{th} of August 2019 and are made on the following assumptions:

- The design and construction requirements of AS2870 must be followed.
- The recommendations for foundation performance and site maintenance set out in Appendix B of AS2870 must be followed.
- The proposed dwellings must be in accordance with AS2870. A detailed geotechnical investigation will be required for other dwellings to be classified in accordance with the BCA.

It is recommended that house owners are made aware of recommendations in the CSIRO publication, "Guide to Home Owners on Foundation Maintenance and Footing Performance" and AS2870 Appendix H of AS2871-2011.

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APPENDIX A

TABLE A SUMMARY OF TEST PITS

TEST PIT LOCATION PLAN (Drawing No 8599/27-AA TP1-TP125)

TABLE A	
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TEST PIT	999/21-AA	SAMPLE	Our Ref: 8599/27-AA						
NUMBER	DEPTH (m)	DEPTH (m)	MATERIAL DESCRIPTION						
TP1	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots						
	0.2-0.4	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>						
	0.4-1.5	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M≤PL, stiff						
TP2	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots						
	0.2-0.3	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>						
	0.3-1.5	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, M≤PL, stiff						
		0.5-0.8 (U50)							
TP3	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots						
	0.2-0.4	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>						
	0.4-1.5	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, stiff<="" td=""></pl,>						
TP4	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots						
	0.2-0.6	0.2-0.3 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td=""></pl,>						
	0.6-1.2	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>						
	1.2-1.5	1.2-1.4 (DB)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>						
TP5	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots						
	0.2-0.4	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>						
	0.4-1.5	0.7-0.8 (DS)	FILL: Silty Clay, medium to high plasticity, grey and orange, with ironstone, gravel and cobbles, M <omc, compacted<="" td="" well=""></omc,>						

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TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP6	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-1.0	0.2-0.3 (DS)	FILL: Silty Clay, medium plasticity, red and grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>
	1.0-1.5	0.7-0.8 (DS)	FILL: Silty Clay, medium to high plasticity, grey and orange, with ironstone, gravel and cobbles, M <omc, compacted<="" td="" well=""></omc,>
TP7	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-1.0	0.2-0.3 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td="" very=""></pl,>
	1.0-1.5	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff<="" td="" very=""></pl,>
		1.0-1.2 (DB)	
TP8	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-0.8	0.2-0.3 (DS)	FILL: Silty Clay, medium plasticity, red and grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>
	0.8-1.5	0.7-0.8 (DS)	FILL: Silty Clay, medium to high plasticity, grey and orange, with ironstone, gravel and cobbles, M <omc, compacted<="" td="" well=""></omc,>
TP9	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-0.3	0.2-0.3 (DS)	FILL: Silty Clay, medium plasticity, red and grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>
	0.3-1.0	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td="" very=""></pl,>
	1.0-1.5		(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff<="" td="" very=""></pl,>

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TEST PIT	99/27-AA DEPTH (m)	SAMPLE	MATERIAL DESCRIPTION	
NUMBER	,	DEPTH (m)		
TP10	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots	
	0.2-0.3	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>	
	0.3-1.3	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td="" very=""></pl,>	
	1.3-1.5		(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff<="" td="" very=""></pl,>	
TP11	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots	
	0.2-0.4	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>	
	0.4-1.0	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td="" very=""></pl,>	
	1.0-1.5		(CI) Silty Sandy CLAY, medium plasticity, dark brown and red, with sandstone gravel, M <pl, stiff<="" td="" very=""></pl,>	
TP12	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots	
	0.2-0.9	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown, with ironstone, gravel and cobbles, M <omc, compacted<="" td="" well=""></omc,>	
	0.9-1.5	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>	
TP13	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots	
	0.2-0.5	0.2-0.3 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td="" very=""></pl,>	
	0.5-1.5	0.7-0.8 (DS)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and	
		0.2-0.5 (U50)	orange, with sandstone gravel, M <pl, stiff<="" td="" very=""></pl,>	
TP14	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots	
	0.2-1.0	0.2-0.3 (DS) 0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff<="" td="" very=""></pl,>	
	1.0-1.5	1.1-1.3 (DB)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, hard<="" td=""></pl,>	

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TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP15	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-1.3	0.2-0.3 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, stiff<="" td="" very=""></pl,>
	1.3-1.5	0.7-0.8 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff<="" td="" very=""></pl,>
TP16	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-0.4	0.2-0.3 (DS)	FILL: Silty Clay, medium to high plasticity, grey and orange, with ironstone, gravel and cobbles, M <omc, compacted<="" td="" well=""></omc,>
	0.4-1.5	0.7-0.8 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, hard<="" td=""></pl,>
TP17	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-0.7	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>
	0.7-1.5	0.7-0.8 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, hard<="" td=""></pl,>
TP18	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-0.4	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>
	0.4-1.5	0.7-0.8 (DS)	(CI) Silty CLAY, medium plasticity, grey/red, with ironstone gravel and cobbles, M <pl, stiff<="" td="" very=""></pl,>
TP19	0.0-0.7	0.2-0.3 (DS)	(CL) Silty Sandy CLAY, low plasticity, red, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>
	0.7-0.9	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>
	0.9-1.5		(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>

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Our Ref: 85 TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP20	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-0.8	0.2-0.3 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>
	0.8-1.5	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>
TP21	0.0-0.5	0.2-0.3 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td="" very=""></pl,>
	0.5-1.3	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>
	1.3-1.5		(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, hard<="" td=""></pl,>
TP22	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-1.2	0.2-0.3 (DS)	(CI-CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>
	1.2-1.5	0.7-0.8 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>
TP23	0.0-0.5	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>
	0.5-0.9	0.7-0.8 (DS)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>
	0.9-1.5		(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>
TP24	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-0.6	0.2-0.3 (DS)	FILL: Silty Clay, medium to high plasticity, grey and orange, with ironstone, gravel and cobbles, M <omc, compacted<="" td="" well=""></omc,>
	0.6-1.5	0.7-0.8 (DS)	(CI-CH) Silty CLAY, medium to high plasticity, pale grey/red, with ironstone gravel and cobbles, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>
		0.7-1.0 (U50)	

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TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION	
TP25	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots	
	0.2-0.5	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>	
	0.5-1.3	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, stiff<="" td="" very=""></pl,>	
	1.3-1.5		(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff<="" td="" very=""></pl,>	
TP26	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots	
	0.2-0.9	0.2-0.3 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, stiff<="" td="" very=""></pl,>	
	0.9-1.5	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff<="" td="" very=""></pl,>	
TP27	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots	
	0.2-0.3	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>	
	0.3-1.0	0.7-0.8 (DS)	(CI-CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, stiff<="" td="" very=""></pl,>	
	1.0-1.5		(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td="" very=""></pl,>	
TP28	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots	
	0.2-1.2	0.2-0.3 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td="" very=""></pl,>	
	1.2-1.5	0.7-0.8 (DS) 0.7-0.9 (DB)	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff<="" td="" very=""></pl,>	

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Our Ref: 85 TEST PIT NUMBER	DEPTH (m)	SAMPLE	MATERIAL DESCRIPTION
		DEPTH (m)	
TP29	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-0.3	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>
	0.3-0.8	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td=""></pl,>
	0.8-1.5		(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff<="" td=""></pl,>
TP30	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-0.9	0.2-0.3 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, stiff<="" td=""></pl,>
	0.9-1.3	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>
	1.3-1.5		(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>
TP31	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-0.4	0.2-0.3 (DS)	FILL: Silty Clay, medium plasticity, red and grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>
	0.4-0.7		(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, stiff<="" td="" very=""></pl,>
	0.7-1.5	0.7-0.8 (DS)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M <pl, stiff<="" td="" very=""></pl,>
TP32	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-0.4	0.2-0.3 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, hard<="" td=""></pl,>
	0.4-1.5	0.7-0.8 (DS)	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, hard<="" td=""></pl,>

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roots

SAMPLE

DEPTH (m)

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DEPTH (m)

0.0-0.2

TEST PIT

NUMBER

TP33

	0.2-1.3	0.2-0.3 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, M≤PL, very stiff
	1.3-1.5	0.7-0.8 (DS) 0.3-0.5 (DB)	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M≤PL, very stiff
TP34	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-0.5	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>
	0.5-1.0	0.7-0.8 (DS)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M <pl, stiff<="" td="" very=""></pl,>
	1.0-1.5		(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td="" very=""></pl,>
TP35	0.0-0.2	0.2-0.3 (DS)	TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-1.2	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>
	1.2-1.5		(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td="" very=""></pl,>
TP36	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-0.7	0.2-0.3 (DS)	FILL: Silty Clay, medium plasticity, red and grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>
	0.7-1.5	0.8-0.9 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td="" very=""></pl,>
TP37	0.0-0.2	0.2-0.3 (DS)	TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.2-1.3	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown mottled grey, with traces of ironstone and sandstone gravel M <omc, compacted<="" td="" well=""></omc,>
	1.3-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, stiff<="" td="" very=""></pl,>

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MATERIAL DESCRIPTION

TOPSOIL: Silty Clay, low plasticity, dark brown, with grass

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TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION		
TP38	0.0-0.1		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots		
	0.1-0.4	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.4-1.2	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>		
	1.2-1.5		(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>		
TP39	0.0-0.2		FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.2-0.7	0.2-0.3 (DS)	FILL: Silty Clay, medium plasticity, red and grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>		
	0.7-1.5	0.5-0.6 (DS) 0.6-0.9 (U50)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td="" very=""></pl,>		
TP40	0.0-0.2		TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots		
	0.2-0.9	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown mottled grey, M <omc, compacted<="" td="" well=""></omc,>		
	0.9-1.5	0.5-0.6 (DS)	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, hard<="" td=""></pl,>		
TP41	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.2-1.3	0.5-0.6 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, stiff<="" td="" very=""></pl,>		
	1.3-1.5		(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff<="" td=""></pl,>		
TP42	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.2-0.9	0.5-0.6 (DS)	FILL: Silty Clay, medium plasticity, red and grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>		
	0.9-1.5	1.0-1.2 (DB)	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff<="" td="" very=""></pl,>		

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TEST PIT SAMPLE MATTERIA DECORPORTION			
NUMBER	DEPTH (m)	DEPTH (m)	MATERIAL DESCRIPTION
TP43	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.2-1.1	0.5-0.6 (DS)	FILL: Silty Clay, medium plasticity, red and grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>
	1.1-15		(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>
TP44	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.2-0.9	0.5-0.6 (DS)	FILL: Silty Clay, medium plasticity, red and grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>
	0.9-1.5		(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff<="" td="" very=""></pl,>
TP45	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.2-0.8	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>
	0.8-1.5	0.7-1.0 (U50)	(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>
TP46	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.2-1.2	0.5-0.6 (DS)	FILL: Silty Clay, medium plasticity, red and grey, with ironstone gravel and cobbles, M <omc, compacted<="" td="" well=""></omc,>
	1.2-1.5		(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>
TP47	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.2-0.9	0.5-0.6 (DS)	FILL: Silty Clay, medium plasticity, red and grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>
	0.9-1.5	1.1-1.3 (DB)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, stiff<="" td="" very=""></pl,>

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TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION	
TP48	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>	
	0.2-0.8	0.5-0.6 (DS)	FILL: Silty Clay, high plasticity, grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>	
	0.8-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>	
TP49	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>	
	0.2-0.8	0.5-0.6 (DS)	FILL: Silty Clay, high plasticity, grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>	
	0.8-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>	
TP50	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>	
	0.2-0.9	0.5-0.6 (DS)	FILL: Silty Clay, high plasticity, grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>	
	0.9-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>	
TP51	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>	
	0.2-0.6	0.5-0.6 (DS)	FILL: Silty Clay, high plasticity, grey, with ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>	
	0.6-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>	
TP52	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>	
	0.2-0.8	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>	
	0.8-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>	

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Our Ref: 8599/27-AA					
TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION		
TP53	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.2-0.8	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, dark brown, traces of ironstone, M <omc, compacted<="" td="" well=""></omc,>		
	0.8-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>		
TP54	0.0-0.1	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.1-0.7	0.5-0.6 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, hard<="" td=""></pl,>		
	0.7-1.5		(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, hard<="" td=""></pl,>		
TP55	0.0-0.1	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.1-0.7	0.5-0.6 (DS)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M <pl, stiff<="" td=""></pl,>		
	0.7-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, very stiff to hard		
TP56	0.0-0.1	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.1-0.8	0.5-0.6 (DS)	(CI-CH) Silty CLAY, medium to high plasticity, pale grey, with sandstone, cobbles and boulders, M <pl, stiff="" to="" very<br="">stiff</pl,>		
	0.8-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>		
TP57	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.2-1.5	0.5-0.6 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>		

Our Ref: 8599/27-AA				
TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION	
TP58	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>	
	0.2-1.5	0.5-0.6 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>	
TP59	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>	
	0.2-1.5	0.5-0.6 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>	
		0.4-0.7 (U50)		
TP60	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>	
	0.2-1.5	0.5-0.6 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>	
TP61	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>	
	0.2-1.5	0.5-0.6 (DS)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone and ironstone gravel, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>	
TP62	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>	
	0.2-1.0	0.5-0.6 (DS)	(CH) Silty Sandy CLAY, high plasticity, pale grey and orange, with sandstone gravel and cobbles, M <pl, stiff<="" td="" very=""></pl,>	
	1.0-1.5	1.2-1.4 (DB)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, with cobbles and boulders, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>	
TP63	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>	
	0.2-0.9	0.5-0.6 (DS)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>	
	0.9-1.5		(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, hard<="" td=""></pl,>	

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TEST PIT NUMBER DEPTH (m) SAMPLE DEPTH (m) MATERIAL DESCRIPTION TP64 0.0-0.2 0.2-0.3 (DS) FILL: Sitty Sandy Clay, low plasticity, brown, M-OMC, well compacted 0.2-0.8 0.5-0.6 (DS) FILL: Sitty Clay, medium plasticity, red and grey, with ironstone gravel, M-OMC, well compacted 0.8-1.5 0.5-0.6 (DS) FILL: Sitty Clay, nedium plasticity, red mottled grey, traces of ironstone, M-PL, hard TP65 0.0-0.2 0.2-0.3 (DS) FILL: Sitty Sandy Clay, low plasticity, brown, M-OMC, well compacted 0.2-0.9 0.5-0.6 (DS) (CI) Sitty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M-PL, stiff to very stiff 0.9-1.5 (CH) Sitty CLAY, high plasticity, pale grey and pale brown, M <pl, hard<="" stiff="" td="" to="" very=""> TP66 0.0-0.2 0.2-0.3 (DS) FILL: Sitty Sandy Clay, low plasticity, brown, M-OMC, well compacted 0.2-1.1 0.5-0.6 (DS) (CH) Sitty CLAY, high plasticity, pale grey, with ironstone gravel, M-PL, very stiff to hard TP67 0.0-0.2 0.2-0.3 (DS) FILL: Sitty Sandy Clay, low plasticity, brown, M-OMC, well compacted 0.2-1.5 0.5-0.6 (DS) (CI-CH) Sitty CLAY, medium to high plasticity, pale grey and pale brown, M-PL, hard TP67 0.0-0.3 0.2-0.3 (DS)</pl,>	Our Ref: 8599/27-AA					
well compacted 0.2-0.8 0.5-0.6 (DS) FILL: Silty Clay, medium plasticity, red and grey, with ironstone gravel, M-CMC, well compacted 0.8-1.5 (CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M-PL, hard TP65 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M-OMC, well compacted 0.2-0.9 0.5-0.6 (DS) (CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M-PL, stiff to very stiff 0.9-1.5 (CH) Silty Sandy Clay, low plasticity, brown, M-OMC, well compacted 0.9-1.5 (CH) Silty CLAY, high plasticity, pale grey and pale brown, M-PL, very stiff to hard TP66 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M-OMC, well compacted 0.2-1.1 0.5-0.6 (DS) (CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M-PL, very stiff to hard 1.1-1.5 (CH) Silty CLAY, high plasticity, pale grey and pale brown, M-PL, hard TP67 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M-OMC, well compacted 0.2-1.5 0.2-1.5 0.5-0.6 (DS) (CI-CH) Silty CLAY, medium to high plasticity, pale grey and yellow brown, with ironstone gravel, M-PL, very stiff to hard TP68 </th <th>TEST PIT NUMBER</th> <th>DEPTH (m)</th> <th></th> <th>MATERIAL DESCRIPTION</th>	TEST PIT NUMBER	DEPTH (m)		MATERIAL DESCRIPTION		
TP65 0.8-1.5 ironstone gravel, M <omc, compacted<="" td="" well=""> TP65 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well=""> 0.2-0.9 0.5-0.6 (DS) (CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M<pl, stiff="" stiff<="" td="" to="" very=""> 0.9-1.5 (CH) Silty CLAY, high plasticity, pale grey and pale brown, M<pl, hard<="" stiff="" td="" to="" very=""> TP66 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well=""> 0.9-1.5 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, pale grey and pale brown, M<pl, hard<="" stiff="" td="" to="" very=""> TP66 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well=""> 0.2-1.1 0.5-0.6 (DS) (CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very=""> 1.1-1.5 (CH) Silty CLAY, high plasticity, pale grey and pale brown, M<pl, hard<="" td=""> TP67 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well=""> 0.2-1.5 0.5-0.6 (DS) (CI-CH) Silty CLAY, medium to high plasticity, pale grey and yellow brown, with ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very=""> TP68 0.0-0.3 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well=""> <t< td=""><td>TP64</td><td>0.0-0.2</td><td>0.2-0.3 (DS)</td><td></td></t<></omc,></pl,></omc,></pl,></pl,></omc,></pl,></omc,></pl,></pl,></omc,></omc,>	TP64	0.0-0.2	0.2-0.3 (DS)			
TP65 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""> 0.2-0.9 0.5-0.6 (DS) (CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M<pl, stiff="" stiff<="" td="" to="" very=""> 0.9-1.5 (CH) Silty CLAY, high plasticity, pale grey and pale brown, M<pl, hard<="" stiff="" td="" to="" very=""> TP66 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, pale grey and pale brown, M<pl, hard<="" stiff="" td="" to="" very=""> TP66 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, pale grey, with ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very=""> 1.1-1.5 (CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very=""> TP67 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well=""> 0.2-1.5 0.5-0.6 (DS) (CI-CH) Silty CLAY, medium to high plasticity, pale grey and y ellow brown, with ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very=""> TP68 0.0-0.3 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well=""> 0.3-1.5 0.5-0.6 (DS) (CI) Silty CLAY, medium to high plasticity, pale grey and orange, with sandstone and ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very=""> TP68 0.0-0.3 0.2-0.3 (DS) <!--</td--><td></td><td>0.2-0.8</td><td>0.5-0.6 (DS)</td><td></td></pl,></omc,></pl,></omc,></pl,></pl,></pl,></pl,></pl,></omc,>		0.2-0.8	0.5-0.6 (DS)			
Well compacted well compacted 0.2-0.9 0.5-0.6 (DS) (CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M <pl, stiff="" stiff<="" td="" to="" very=""> 0.9-1.5 (CH) Silty CLAY, high plasticity, pale grey and pale brown, M<pl, hard<="" stiff="" td="" to="" very=""> TP66 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well=""> 0.2-1.1 0.5-0.6 (DS) (CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very=""> 1.1-1.5 (CH) Silty CLAY, high plasticity, pale grey and pale brown, M<pl, hard<="" td=""> TP67 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well=""> 0.2-1.5 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well=""> 0.2-1.5 0.5-0.6 (DS) (CI-CH) Silty CLAY, medium to high plasticity, pale grey and yellow brown, with ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very=""> TP68 0.0-0.3 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well=""> 0.3-1.5 0.5-0.6 (DS) (CI) Silty Sandy Clay, low plasticity, pale grey and orange, with sandstone and ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very=""> TP69 0.0-0.3 0.2-0.3 (DS)</pl,></omc,></pl,></omc,></omc,></pl,></pl,></omc,></pl,></pl,>		0.8-1.5				
0.9-1.5 orange, with sandstone gravel, M-PL, stiff to very stiff (CH) Silty CLAY, high plasticity, pale grey and pale brown, M-PL, very stiff to hard TP66 0.0-0.2 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M-OMC, well compacted 0.2-1.1 0.5-0.6 (DS) (CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M-PL, very stiff to hard 1.1-1.5 (CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M-PL, very stiff to hard (D2-1.1 0.5-0.6 (DS) (CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M-PL, very stiff to hard (CH) Silty CLAY, high plasticity, pale grey and pale brown, M-PL, hard TP67 0.0-0.2 0.2-1.5 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M-OMC, well compacted 0.2-1.5 0.5-0.6 (DS) (CI-CH) Silty CLAY, medium to high plasticity, pale grey and yellow brown, with ironstone gravel, M-PL, very stiff to hard TP68 0.0-0.3 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, brown, M-OMC, well compacted 0.3-1.5 0.5-0.6 (DS) (CI) Silty Sandy Clay, low plasticity, brown, M-OMC, well compacted 0.3-1.5 0.2-0.3 (DS) FILL: Silty Sandy Clay, low plasticity, bro	TP65	0.0-0.2	0.2-0.3 (DS)			
TP660.0-0.20.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" th="" well="">0.2-1.10.5-0.6 (DS)(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very="">1.1-1.5(CH) Silty CLAY, high plasticity, pale grey and pale brown, M<pl, hard<="" td="">TP670.0-0.20.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">0.2-1.50.5-0.6 (DS)(CI-CH) Silty CLAY, medium to high plasticity, pale grey and yellow brown, with ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very="">TP680.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">0.3-1.50.5-0.6 (DS)(CI) Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">0.3-1.50.5-0.6 (DS)FILL: Silty Sandy Clay, low plasticity, pale grey and orange, with sandstone and ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very="">TP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">0.3-1.50.5-0.6 (DS)(CI) Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">(D) Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">(D) Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">(D) Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">(D) Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">(D) Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">(D) Silty Sandy CLAY, medium plasticity, pale grey and(D) Silty Sandy CLAY, medium plasticity, pale grey and(D) Silty</omc,></omc,></omc,></omc,></omc,></omc,></omc,></pl,></omc,></omc,></pl,></omc,></pl,></pl,></omc,>		0.2-0.9	0.5-0.6 (DS)			
Well compacted0.2-1.10.5-0.6 (DS)(CH) Silty CLAY, high plasticity, pale grey, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very="">1.1-1.5(CH) Silty CLAY, high plasticity, pale grey and pale brown, M<pl, hard<="" td="">TP670.0-0.20.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, </omc, well compacted0.2-1.50.5-0.6 (DS)(CI-CH) Silty CLAY, medium to high plasticity, pale grey and yellow brown, with ironstone gravel, M<pl, stiff<br="" very=""></pl,>to hardTP680.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, </omc, well compacted0.3-1.50.5-0.6 (DS)(CI) Silty Sandy Clay, low plasticity, pale grey and orange, with sandstone and ironstone gravel, M<pl, very<br=""></pl,>stiff to hardTP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, </omc, well compactedTP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, </omc, well compacted0.3-1.50.5-0.6 (DS)(CI) Silty Sandy Clay, low plasticity, brown, M<omc, </omc, well compacted(D.3-1.50.5-0.6 (DS)(CI) Silty Sandy Clay, low plasticity, brown, M<omc, </omc, well compacted(D.3-1.50.5-0.6 (DS)(CI) Silty Sandy Clay, low plasticity, pale grey and orange, with sandstone and ironstone gravel, M<pl, very<br=""></pl,>stiff to hard(D.3-1.50.5-0.6 (DS)(CI) Silty Sandy CLAY, medium plasticity, pale grey and plasticity, pale grey and</pl,></pl,>		0.9-1.5				
TP670.0-0.20.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, pale grey and pale brown, M <pl, hard<="" th="">TP670.0-0.20.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, </omc, well compacted0.2-1.50.5-0.6 (DS)(CI-CH) Silty CLAY, medium to high plasticity, pale grey and yellow brown, with ironstone gravel, M<pl, stiff<br="" very=""></pl,>to hardTP680.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, </omc, well compactedTP680.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, pale grey and orange, with sandstone and ironstone gravel, M<pl, very<br=""></pl,>stiff to hardTP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, </omc, well compactedTP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, </omc, well compactedTP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, </omc, well compactedTP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, </omc, well compacted</pl,>	TP66	0.0-0.2	0.2-0.3 (DS)			
TP670.0-0.20.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" th="" well="">0.2-1.50.5-0.6 (DS)(CI-CH) Silty CLAY, medium to high plasticity, pale grey and yellow brown, with ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very="">TP680.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">0.3-1.50.5-0.6 (DS)(CI) Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">TP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone and ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very="">TP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">0.3-1.50.5-0.6 (DS)(CI) Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well=""></omc,></omc,></pl,></omc,></omc,></pl,></omc,>		0.2-1.1	0.5-0.6 (DS)			
Well compacted0.2-1.50.5-0.6 (DS)(CI-CH) Silty CLAY, medium to high plasticity, pale grey and yellow brown, with ironstone gravel, M <pl, stiff<br="" very=""></pl,> to hardTP680.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M <omc, </omc, well compacted0.3-1.50.5-0.6 (DS)(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone and ironstone gravel, M <pl, very<br=""></pl,> stiff to hardTP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M <omc, </omc, well compacted0.3-1.50.5-0.6 (DS)(CI) Silty Sandy Clay, low plasticity, brown, M <omc, </omc, well compacted(D.3-1.50.5-0.6 (DS)(CI) Silty Sandy Clay, low plasticity, brown, M <omc, </omc, well compacted(D.3-1.50.5-0.6 (DS)(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, well compacted(D.3-1.50.5-0.6 (DS)(CI) Silty Sandy CLAY, medium plasticity, pale grey and well compacted		1.1-1.5				
TP680.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" th="" well="">0.3-1.50.5-0.6 (DS)(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone and ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very="">TP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone and ironstone gravel, M<pl, hard<="" stiff="" td="" to="" very="">TP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M<omc, compacted<="" td="" well="">0.3-1.50.5-0.6 (DS)(CI) Silty Sandy CLAY, medium plasticity, pale grey and</omc,></pl,></pl,></omc,>	TP67	0.0-0.2	0.2-0.3 (DS)			
Well compacted0.3-1.50.5-0.6 (DS)0.3-1.50.5-0.6 (DS)(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone and ironstone gravel, M <pl, very<br=""></pl,> stiff to hardTP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M <omc, </omc, well compacted0.3-1.50.5-0.6 (DS)(CI) Silty Sandy CLAY, medium plasticity, pale grey and		0.2-1.5	0.5-0.6 (DS)	and yellow brown, with ironstone gravel, M <pl, stiff<="" td="" very=""></pl,>		
TP690.0-0.30.2-0.3 (DS)FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" th="" well="">0.3-1.50.5-0.6 (DS)(CI) Silty Sandy CLAY, medium plasticity, pale grey and</omc,>	TP68	0.0-0.3	0.2-0.3 (DS)			
0.3-1.5 0.5-0.6 (DS) (CI) Silty Sandy CLAY, medium plasticity, pale grey and		0.3-1.5	0.5-0.6 (DS)	orange, with sandstone and ironstone gravel, M <pl, td="" very<=""></pl,>		
	TP69	0.0-0.3	0.2-0.3 (DS)			
		0.3-1.5	0.5-0.6 (DS)			

TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP70	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.2-0.7	0.5-0.6 (DS)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>
	0.7-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, stiff<="" td="" very=""></pl,>
TP71	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-1.5	0.5-0.6 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" td=""></pl,>
TP72	0.0-0.2	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.2-0.9	0.5-0.6 (DS)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>
	0.9-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" td=""></pl,>
TP73	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-1.5	0.5-0.6 (DS)	(CH) Silty CLAY, high plasticity, pale grey and pale brown, with ironstone gravel, M <pl, hard<="" td=""></pl,>
TP74	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with ironstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>
TP75	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-0.9	0.5-0.6 (DS)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>
	0.9-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, stiff<="" td="" very=""></pl,>

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	Our Ref: 8599/27-AA					
TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION			
TP76	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>			
	0.3-1.1	0.5-0.6 (DS)	(CI-CH) Silty CLAY, medium plasticity, pale grey, with ironstone gravel, M <pl, stiff<="" td="" very=""></pl,>			
	1.1-1.5		(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M <pl, stiff<="" td="" very=""></pl,>			
TP77	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>			
	0.3-0.8	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey and yellow-brown, with red staining ironstone gravel and cobbles, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>			
	0.8-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>			
TP78	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>			
	0.3-0.9	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>			
	0.9-1.5		(CI-CH) Silty CLAY, medium to high plasticity, pale grey and yellow-brown, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>			
TP79	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>			
	0.3-0.7	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and pebbles, M <pl, stiff<="" td="" very=""></pl,>			
	0.7-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, hard<="" td=""></pl,>			
TP80	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>			
	0.3-0.6	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown, with sandstone gravel, M <omc, compacted<="" td="" well=""></omc,>			
	0.6-1.5		(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>			

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Our Ref: 8599/27-AA					
TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION		
TP81	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.3-0.5	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown, with sandstone gravel, M <omc, compacted<="" td="" well=""></omc,>		
	0.5-1.5		(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff<="" td="" very=""></pl,>		
TP82	0.0-0.6	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.6-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and pebbles, M <pl, stiff<="" td="" very=""></pl,>		
TP83	0.0-0.6	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.6-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff<="" td="" very=""></pl,>		
TP84	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.3-1.5	0.5-0.6 (DS)	(CH) Silty CLAY, high plasticity, grey mottled red-yellow, M <pl, hard<="" td=""></pl,>		
		0.5-0.8 (U50)			
TP85	0.0-0.5	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.5-1.5	0.5-0.6 (DS)	(CI-CH) Silty CLAY, medium to high plasticity, orange and grey-brown, M <pl, stiff<="" td="" very=""></pl,>		
		1.0-1.2 (DB)			
TP86	0.0-0.3	0.2-0.3 (DS)	TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots		
	0.3-0.4		SILTSTONE, red and yellow-brown, extremely to distinctly weathered, very low to low strength, with ironstone layers		
TP87	0.0-0.3	0.2-0.3 (DS)	TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots		
	0.3-0.4		SILTSTONE, red and yellow-brown, extremely to distinctly weathered, very low to low strength, with ironstone layers		
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Our Ref: 85	99/27-AA		
TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP88	0.0-0.3	0.2-0.3 (DS)	TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.3-0.4		SILTSTONE, red and yellow-brown, extremely to distinctly weathered, very low to low strength, with ironstone layers
TP89	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-1.5	0.5-0.6 (DS)	(CI-CH) Silty CLAY, medium to high plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>
TP90	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey and yellow-red, with red staining ironstone gravel and cobbles, M <pl, stiff<="" td="" very=""></pl,>
TP91	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-0.4		SILTSTONE, red and yellow-brown, extremely to distinctly weathered, very low to low strength, with ironstone layers
TP92	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>
TP93	0.0-0.3	0.2-0.3 (DS)	TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff<="" td="" very=""></pl,>
TP94	0.0-0.3	0.2-0.3 (DS)	TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots
	0.3-0.4		SILTSTONE, red and yellow-brown, extremely to distinctly weathered, very low to low strength, with ironstone layers
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Our Ref: 8599/27-AA					
TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION		
TP95	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.3-1.5	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown mottled grey, with shale and ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>		
TP96	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.3-1.5	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown and red, with sandstone and ironstone gravel, M <omc, well<br="">compacted</omc,>		
TP97	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.3-1.2	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown and red, M <omc, compacted<="" td="" well=""></omc,>		
	1.2-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>		
TP98	0.0-0.4	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.4-1.2	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown, with shale gravel, M <omc, compacted<="" td="" well=""></omc,>		
	1.2-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>		
TP99	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.3-1.5	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown mottled grey, with sandstone and ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>		
TP100	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>		
	0.3-1.2	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown mottled grey, with sandstone and ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>		
	1.2-1.5		(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>		
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Our Ref: 8599/27-AA						
TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION			
TP101	0.0-0.3	0.2-0.3 (DS)	TOPSOIL: Silty Clay, low plasticity, dark brown, with grass roots			
	0.3-0.7	0.5-0.6 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>			
	0.7-1.5		(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff<="" td="" very=""></pl,>			
TP102	0.0-0.5	0.2-0.3 (DS)	FILL: Silty Clay, low to medium plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>			
	0.5-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and pebbles, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>			
TP103	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>			
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>			
TP104	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>			
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>			
TP105	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, with sandstone gravel, M <omc, compacted<="" td="" well=""></omc,>			
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel, boulders and cobbles, M <pl, stiff<="" td="" very=""></pl,>			
TP106	0.0-0.4	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>			
	0.4-1.5	0.5-0.6 (DS)	(CI-CH) Silty CLAY, medium to high plasticity, grey and red, with ironstone gravel, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>			
		0.6-0.9 (U50)				
TP107	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>			
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey and yellow, with red staining ironstone gravel and cobbles, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>			

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Our Ref: 8599/27-AA							
TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION				
TP108	0.0-0.4	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>				
	0.4-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel, pebbles and cobbles, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>				
TP109	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>				
	0.3-1.5	0.5-0.6 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces of ironstone, M <pi, stiff<="" td="" very=""></pi,>				
		0.7-0.9 (DB)					
TP110	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>				
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pi, hard<="" stiff="" td="" to="" very=""></pi,>				
TP111	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>				
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M <pl, hard<="" td=""></pl,>				
TP112	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>				
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty Sandy CLAY, medium plasticity, pale grey and orange, with sandstone gravel, M <pl, stiff<="" td="" very=""></pl,>				
TP113	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>				
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>				
TP114	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>				
	0.3-1.5	0.5-0.6 (DS)	(CI-CH) Silty CLAY, medium to high plasticity, brown and yellow, with pebbles and cobbles, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>				

Our Ref: 85	99/27-AA		
TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION
TP115	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, very stiff
TP116	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, red and brown-grey, with red staining ironstone gravel and cobbles, M <pl, stiff<="" td="" very=""></pl,>
TP117	0.0-0.3	0.2 -0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-1.5	0.5-0.6 (DS)	(CH) Silty CLAY, high plasticity, red mottled grey, traces
		0.5-0.8 (U50)	of ironstone, M <pl, hard<="" td=""></pl,>
TP118	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>
TP119	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>
TP120	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-1.5	0.5-0.6 (DS)	(CI) Silty CLAY, medium plasticity, grey, with red staining ironstone gravel and cobbles, M <pl, stiff="" stiff<="" td="" to="" very=""></pl,>
TP121	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>
	0.3-0.9	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown mottled grey, with cobbles, M <omc, compacted<="" td="" well=""></omc,>
	0.9-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, stiff<="" td="" very=""></pl,>

	Our Ref: 8599/27-AA						
TEST PIT NUMBER	DEPTH (m)	SAMPLE DEPTH (m)	MATERIAL DESCRIPTION				
TP122	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>				
	0.3-1.2	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown mottled grey, M <omc, compacted<="" td="" well=""></omc,>				
	1.2-1.5		(CH) Silty CLAY, high plasticity, pale grey and pale brown, M <pl, hard<="" stiff="" td="" to="" very=""></pl,>				
TP123	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>				
	0.3-1.5	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown mottled grey, with pebbles, cobbles and ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>				
TP124	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>				
	0.3-1.5	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown mottled grey, with pebbles, cobbles and ironstone gravel, M <omc, compacted<="" td="" well=""></omc,>				
TP125	0.0-0.3	0.2-0.3 (DS)	FILL: Silty Sandy Clay, low plasticity, brown, M <omc, compacted<="" td="" well=""></omc,>				
	0.3-1.5	0.5-0.6 (DS)	FILL: Silty Clay, low to medium plasticity, brown mottled grey, M <omc, compacted<="" td="" well=""></omc,>				



APPENDIX B

SUMMARY OF SITE CLASSIFICATION

TABLE B SUMMARY OF SITE CLASSIFICATIONS

Newpark – Precinct 6 Elara Boulevard, Marsden Park

Lot	Site												
No	Class												
6001	H1	6037	H1	6073	H1	6109	H1	6145	М	6181	М	6217	М
6002	H1	6038	H1	6074	H1	6110	H2	6146	М	6182	М	6218	М
6003	H2	6039	H1	6075	H1	6111	H2	6147	М	6183	S	6219	M
6004	H2	6040	H1	6076	H1	6112	H2	6148	H2	6184	S	6220	М
6005	М	6041	H2	6077	H1	6113	М	6149	H2	6185	М	6221	H2
6006	М	6042	H2	6078	H1	6114	М	6150	H1	6186	М	6222	H2
6007	М	6043	H2	6079	H1	6115	М	6151	H1	6187	М	6223	М
6008	М	6044	H2	6080	H1	6116	М	6152	H1	6188	М	6224	М
6009	М	6045	H2	6081	H1	6117	М	6153	H1	6189	М	6225	М
6010	М	6046	H1	6082	H1	6118	М	6154	H2	6190	М	6226	М
6011	М	6047	H1	6083	H1	6119	М	6155	H2	6191	М	6227	H1
6012	М	6048	H1	6084	H1	6120	М	6156	М	6192	М	6228	H1
6013	H1	6049	H1	6085	H1	6121	М	6157	М	6193	М	6229	М
6014	H1	6050	H1	6086	М	6122	М	6158	М	6194	М	6230	М
6015	H1	6051	H1	6087	М	6123	М	6159	М	6195	М	6231	М
6016	H1	6052	H1	6088	М	6124	М	6160	М	6196	М	6232	М
6017	H1	6053	H1	6089	М	6125	М	6161	М	6197	М	6233	М
6018	H1	6054	H2	6090	М	6126	М	6162	М	6198	М	6234	М
6019	М	6055	H2	6091	H1	6127	H1	6163	М	6199	М	6235	М
6020	М	6056	H2	6092	H1	6128	H1	6164	М	6200	М	6236	М
6021	М	6057	H2	6093	H1	6129	М	6165	М	6201	М	6237	М
6022	М	6058	H2	6094	H1	6130	М	6166	М	6202	М	6238	М
6023	М	6059	H2	6095	H1	6131	H1	6167	М	6203	М	6239	М
6024	М	6060	H1	6096	М	6132	H1	6168	М	6204	М	6240	М
6025	М	6061	H1	6097	М	6133	H1	6169	М	6205	H2	6241	М
6026	М	6062	H1	6098	H2	6134	H1	6170	М	6206	H2	6242	М
6027	М	6063	H2	6099	H2	6135	H2	6171	S	6207	М	6243	М
6028	М	6064	М	6100	H2	6136	H2	6172	S	6208	М	6244	М
6029	М	6065	М	6101	H2	6137	М	6173	S	6209	М	6245	М
6030	М	6066	М	6102	H2	6138	М	6174	S	6210	М	6246	М
6031	М	6067	М	6103	H2	6139	H2	6175	S	6211	М	6247	М
6032	H2	6068	H2	6104	H2	6140	H2	6176	S	6212	М	6248	М
6033	H2	6069	H2	6105	H2	6141	М	6177	S	6213	М		
6034	H2	6070	М	6106	H1	6142	М	6178	S	6214	М		
6035	М	6071	М	6107	H1	6143	М	6179	М	6215	М		
6036	М	6072	H1	6108	H1	6144	М	6180	М	6216	М		

S: Slightly Reactive, Free Surface Movement: 0-20mm M: Moderately Reactive, Free Surface Movement: 20-40mm H1: Highly Reactive, Free Surface Movement: 40-60mm H2: Highly Reactive, Free Surface Movement: 60-75mm

APPENDIX C

LABORATORY TEST RESULTS



SITE CLASSIFICATION RESIDENTIAL DEVELOPMENT WOORONG PARK MARSDEN PARK PRECINCT 6

				Page 1 of
	8599/27 Penrith 19/08/2019		Tested By: Checked By:	BC AK
Sample Identif	ication	Test Pit 4	Test Pit 7	Test Pit 14
Laboratory Nur	mber	8599/27-2	8599/27-3	8599/27-5
Depth (m)		1.2 - 1.4	1.0 - 1.2	1.1 - 1.3
Test Descript	tion			
Liquid Limit (W	/ _L)	37%	72%	47%
Plastic Limit (V	V _P)	18%	20%	15%
Plastic Index (I	l _P)	19%	52%	32%
Linear Shrinka	ge (LS)	8.5%	13.5%	8.5%
Mould Length	(mm)	125	127	127
Sample Histo	ry	Oven Dried Dry Sieved	Oven Dried Dry Sieved	Oven Dried Dry Sieved
Material Desc	ription			
Form No R004 Versio		ed by ER Accredited for compliance with IS0	A Ker D/IEC 17025 - Testing.	Approved Signatory

TEST RESULTS - ATTERBERG LIMITS Test Procedure AS1289 3.1.1, 3.2.1, 3.3.1, 3.4.1

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SITE CLASSIFICATION RESIDENTIAL DEVELOPMENT WOORONG PARK MARSDEN PARK PRECINCT 6

			0.1.1, 0.2.1, 0.0.1, 0.4.1	Page 2 of
Job No: Laboratory Date Tested	8599/27 Penrith 19/08/2019		Tested By: Checked By:	BC AK
Sample Ident	ification	Test Pit 28	Test Pit 42	Test Pit 47
Laboratory Nu	umber	8599/27-7	8599/27-10	8599/27-12
Depth (m)		0.6 - 0.9	1.0 - 1.2	1.1 - 1.3
Test Descrip	otion			
Liquid Limit (\	W _L)	86%	71%	40%
Plastic Limit ((W _P)	22%	21%	14%
Plastic Index	(I _P)	64%	50%	26%
Linear Shrink	age (LS)	18.0%	18.5%	9.5%
Mould Length	ı (mm)	125	125	125
Sample Histo	ory	Oven Dried Dry Sieved	Oven Dried Dry Sieved	Oven Dried Dry Sieved
Material Des	cription			
Form No R004 Vers	sion 12 - 06/13 - Iss	-	A Ken	
NAT	TA	Accredited for compliance with IS	O/IEC 17025 - Testing.	Approved Signatory

TEST RESULTS - ATTERBERG LIMITS Test Procedure AS1289 3.1.1, 3.2.1, 3.3.1, 3.4.1

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SITE CLASSIFICATION RESIDENTIAL DEVELOPMENT WOORONG PARK MARSDEN PARK PRECINCT 6

			Page 3 of
Job No: 8599/27 Laboratory Penrith Date Tested 19/08/201	9	Tested By: Checked By:	BC AK
Sample Identification	Test Pit 62	Test Pit 85	Test Pit 109
Laboratory Number	8599/27-14	8599/27-16	8599/27-18
Depth (m)	1.2 - 1.4	1.0 - 1.2	0.7 - 0.9
Test Description			
Liquid Limit (W_L)	75%	44%	58%
Plastic Limit (W _P)	22%	15%	17%
Plastic Index (I _P)	53%	29%	41%
Linear Shrinkage (LS)	19.0%	10.5%	11.5%
Mould Length (mm)	125	127	125
Sample History	Oven Dried Dry Sieved	Oven Dried Dry Sieved	Oven Dried Dry Sieved
Material Description			
Form No R004 Version 12 - 06/13 -	Issued by ER Accredited for compliance with IS	A Ken	ch 20/09/2019 Approved Signatory

TEST RESULTS - ATTERBERG LIMITS Test Procedure AS1289 3.1.1, 3.2.1, 3.3.1, 3.4.1

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Job No:8599/27Tested By:BNChecked By:AKDate Tested:12/08/2019LaboratoryPenrith

SITE CLASSIFICATION RESIDENTIAL DEVELOPMENT WOORONG PARK MARSDEN PARK PRECINCT 6

TEST RESULTS - SHRINK / SWELL INDEX

Page 1 of 3

Test Procedure: AS 1289 7.1.1						
Sample Identification	Test Pit 2	Test Pit 13	Test Pit 24	Test Pit 40		
Depth (m)	0.5 - 0.8	0.2 - 0.5	0.7 - 1.0	0.6 - 0.9		
Laboratory Number	8599/27-1	8599/27-4	8599/27-6	8599/27-9		
Test Description						
Moisture Content						
Initial %	25.1	25.7	26.8	14.1		
Final %	31.4	33.0	30.3	16.3		
Swell %	5.4	6.3	2.2	4.9		
Shrinkage %	7.2	1.8	3.9	2.8		
Shrink/Swell Index %/ _p F	5.5	2.7	2.8	2.9		
Material Description						

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Job No:8599/27Tested By:BNChecked By:AKDate Tested:12/08/2019LaboratoryPenrith

SITE CLASSIFICATION RESIDENTIAL DEVELOPMENT WOORONG PARK MARSDEN PARK PRECINCT 6

TEST RESULTS - SHRINK / SWELL INDEX

Page 2 of 3

Test Procedure: AS 1289 7.1.1						
Sample Identification	Test Pit 45	Test Pit 59	Test Pit 84	Test Pit 106		
Depth (m)	0.7 - 1.0	0.4 - 0.7	0.5 - 0.8	0.6 - 0.9		
Laboratory Number	8599/27-11	8599/27-13	8599/27-15	8599/27-17		
Test Description						
Moisture Content						
Initial %	23.9	18.7	24.7	12.4		
Final %	27.5	32.0	40.1	14.5		
Swell %	0.2	9.4	8.7	1.9		
Shrinkage %	5.9	2.8	8.3	2.5		
Shrink/Swell Index %/ _p F	3.3	4.2	7.0	1.9		
Material Description						

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Job No:8599/27Tested By:BNChecked By:AKDate Tested:12/08/2019LaboratoryPenrith

SITE CLASSIFICATION RESIDENTIAL DEVELOPMENT WOORONG PARK MARSDEN PARK PRECINCT 6

TEST RESULTS - SHRINK / SWELL INDEX

Page 3 of 3

Test Procedure: AS 1289 7.1.1				
Sample Identification	Test Pit 117			
Depth (m)	0.5 - 0.8			
Laboratory Number	8599/27-19			
Test Description				
Moisture Content				
Initial %	28.4			
Final %	33.1			
Swell %	4.1			
Shrinkage %	7.1			
Shrink/Swell Index %/ _p F	5.1			
Material Description				

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