



LABORATORY REPORT



4043

Contract Number: PSL21/7957

Report Date: 04 November 2021

Client's Reference: 14-944

Client Name: E3P
Taylor Road
Urmston
Manchester
M41 7JQ

For the attention of: Matthew Dee

Contract Title: Vine Street

Date Received: 7/10/2021

Date Commenced: 7/10/2021

Date Completed: 4/11/2021

Notes: Opinions and Interpretations are outside the UKAS Accreditation

A copy of the Laboratory Schedule of accredited tests as issued by UKAS is attached to this report. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. This certificate shall not be reproduced other than in full, without the prior written approval of the laboratory.

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SUMMARY OF LABORATORY SOIL DESCRIPTIONS

[illegible]

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Professional Soils Laboratory

Vine Street

Contract No:

PSL21/7957

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SUMMARY OF SOIL CLASSIFICATION TESTS

(BS1377 : PART 2 : 1990)

[illegible]

SYMBOLS : NP : Non Plastic

*** : Liquid Limit and Plastic Limit Wet Sieved.**



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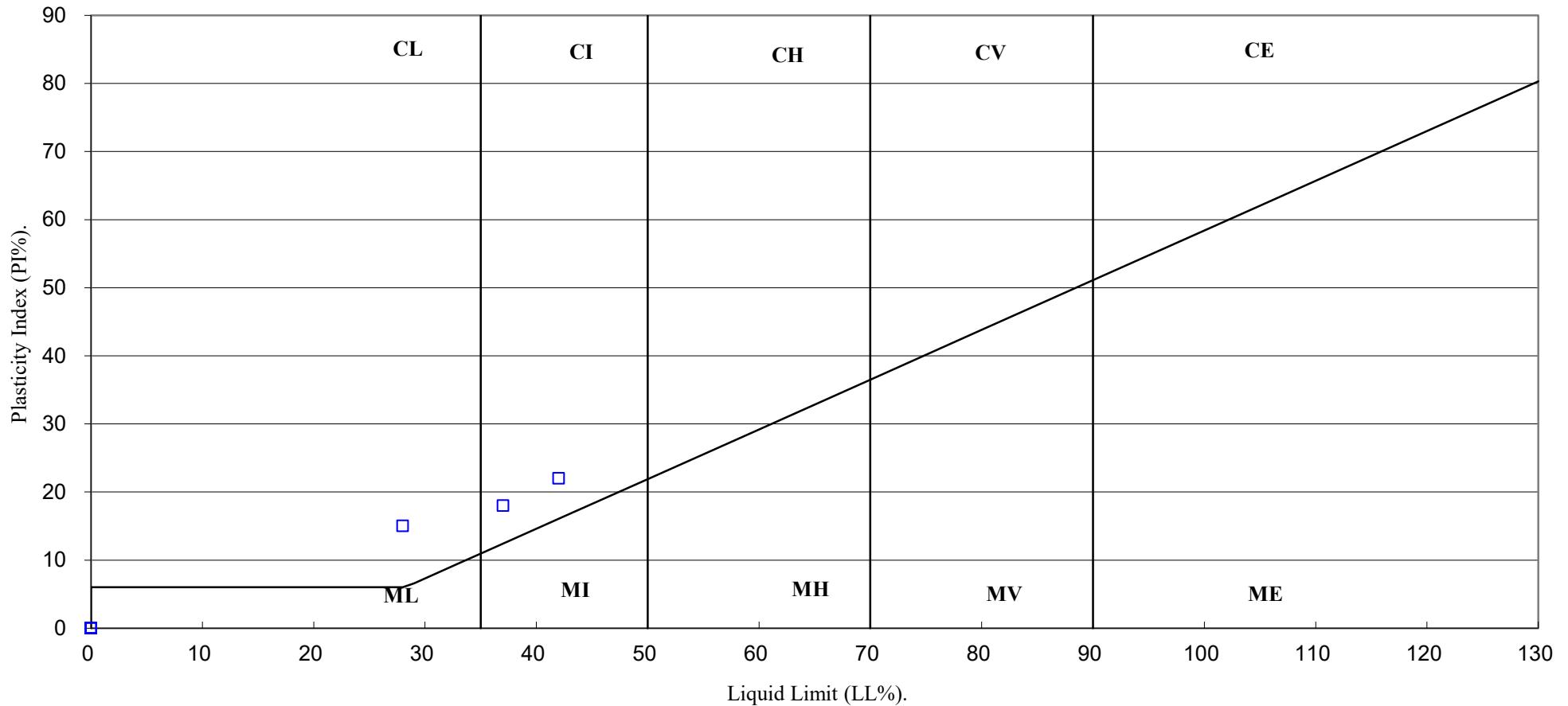
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PLASTICITY CHART FOR CASAGRANDE CLASSIFICATION.



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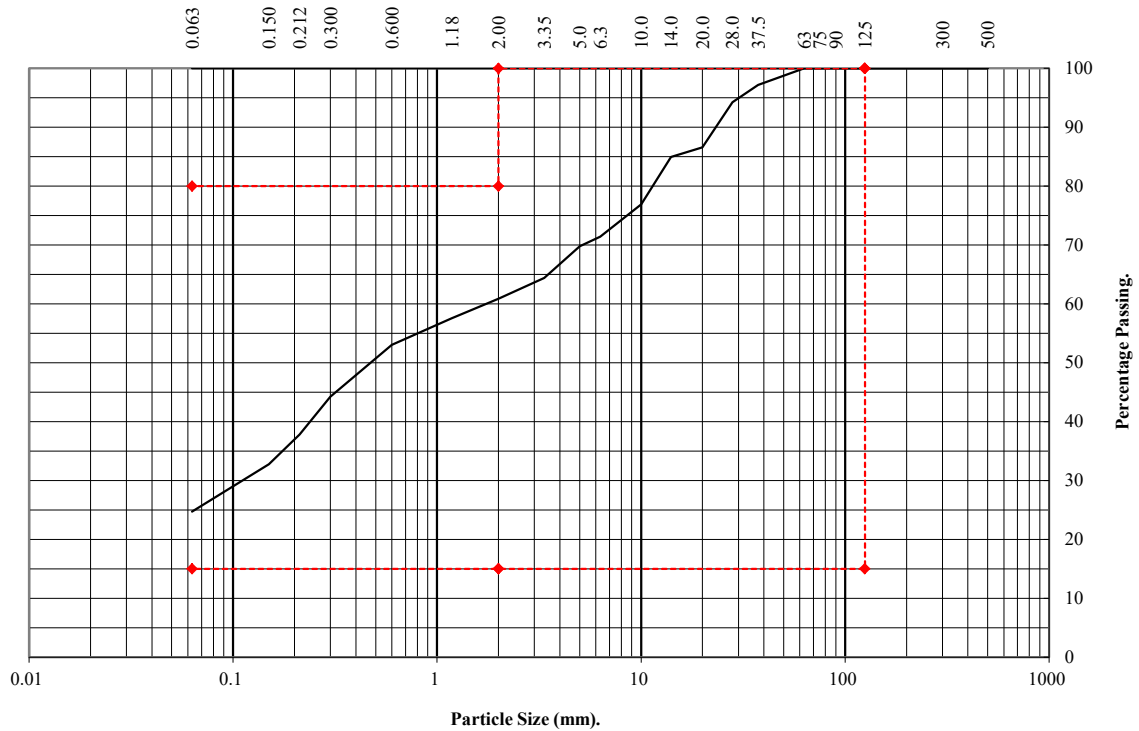
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Number: CP101 @ 2.0-2.45m Classification Type: 2C



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements	
		Lower	Upper
500	100	100	100
300	100		
125	100		
90	100		
75	100		
63	100		
37.5	97		
28	94		
20	87		
14	85		
10	77		
6.3	71	15	80
5	70		
3.35	64		
2	61		
1.18	58		
0.6	53	15	80
0.3	44		
0.212	38		
0.15	33		
0.063	25		

Remarks:
SHW Series 600 Table 6/2 :
Class 2C



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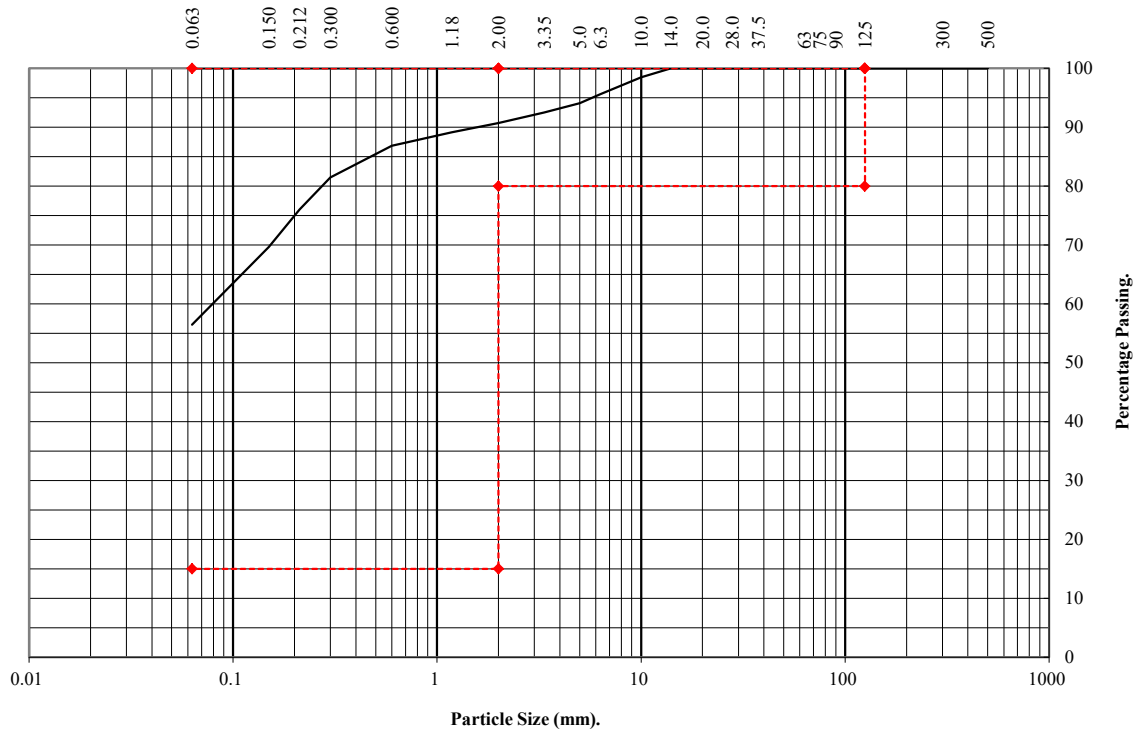
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Number: CP101 @ 12.50-12.95m Classification Type: 2A



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements	
		Lower	Upper
500	100		
300	100		
125	100	100	100
90	100		
75	100		
63	100		
37.5	100		
28	100		
20	100		
14	100		
10	98		
6.3	96		
5	94		
3.35	93		
2	91	80	100
1.18	89		
0.6	87		
0.3	81		
0.212	76		
0.15	70		
0.063	56	15	100

Remarks:

SHW Series 600 Table 6/2 :
Class 2A



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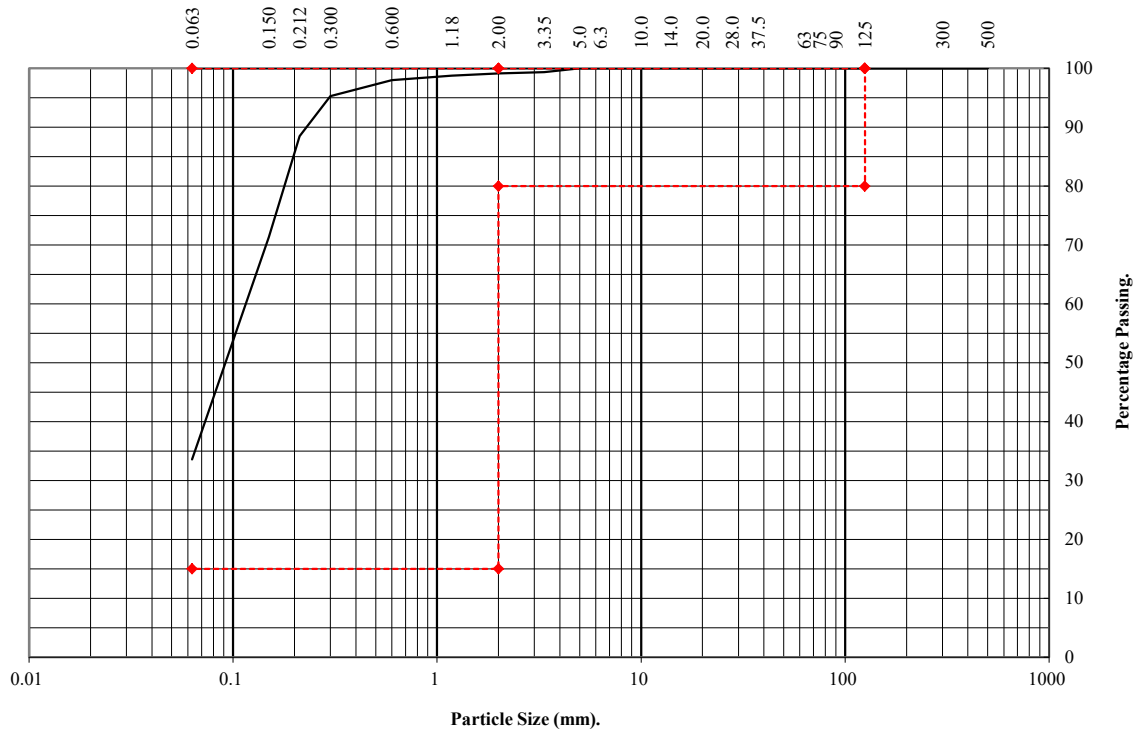
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Number: CP102 @ 9.50-9.95m Classification Type: 2A



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements	
		Lower	Upper
500	100		
300	100		
125	100	100	100
90	100		
75	100		
63	100		
37.5	100		
28	100		
20	100		
14	100		
10	100		
6.3	100		
5	100		
3.35	99		
2	99	80	100
1.18	99		
0.6	98		
0.3	95		
0.212	88		
0.15	71		
0.063	34	15	100

Remarks:

SHW Series 600 Table 6/2 :
Class 2A



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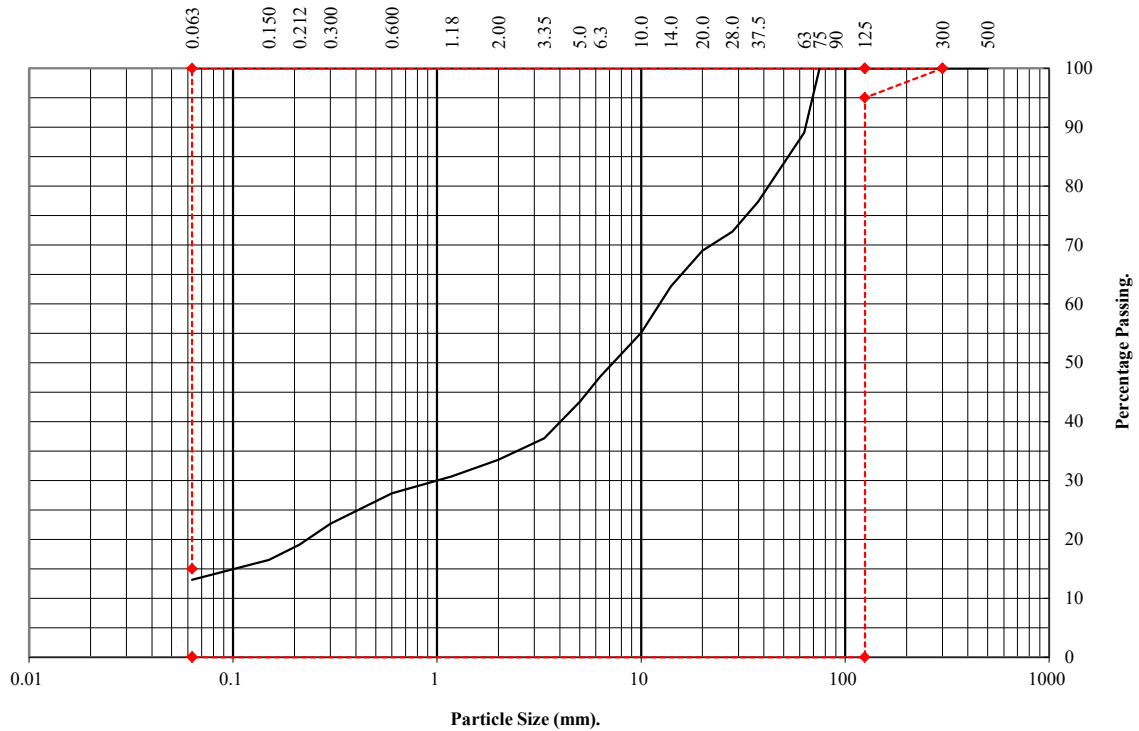
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Number: CP103 @ 3.00-3.45m Classification Type: 1A



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements	
		Lower	Upper
500	100		
300	100	100	100
125	100	95	100
90	100		
75	100		
63	89		
37.5	77		
28	72		
20	69		
14	63		
10	55		
6.3	48		
5	43		
3.35	37		
2	34		
1.18	31		
0.6	28		
0.3	23		
0.212	19		
0.15	17		
0.063	13	0	15

Remarks:
SHW Series 600 Table 6/2 :
Class 1A



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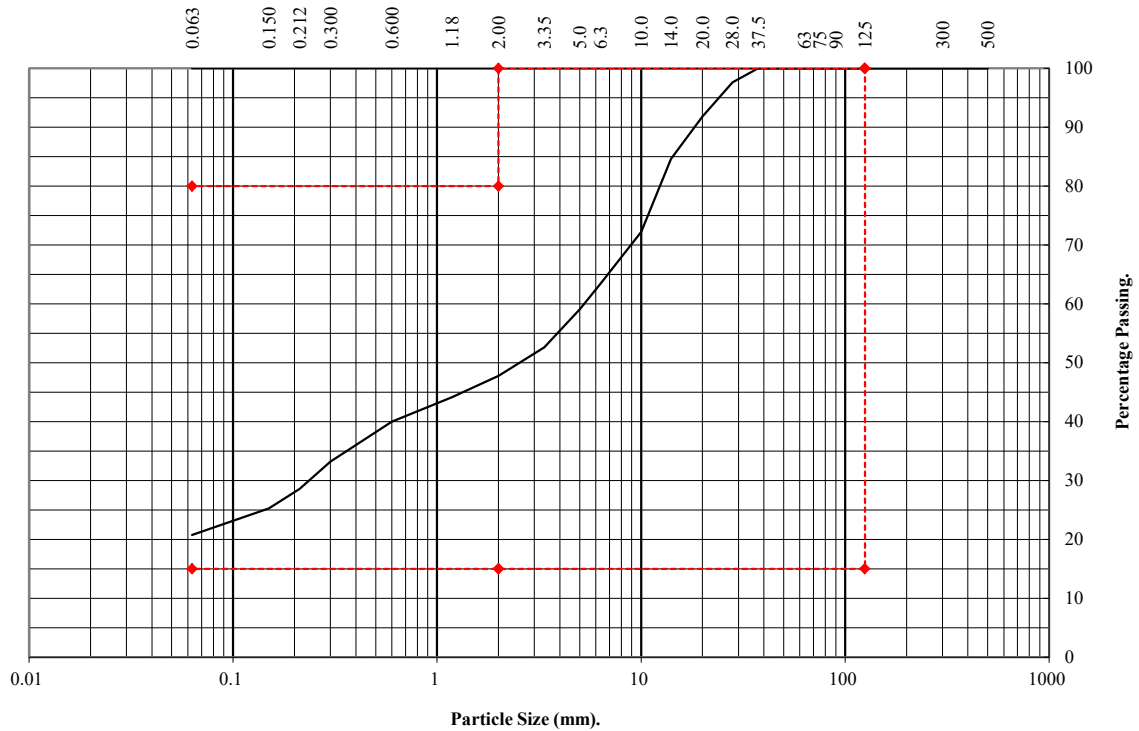
PARTICLE SIZE DISTRIBUTION TEST

BS1377:Part 2:1990

Wet Sieve: Clause 9.2

Classification for Acceptable Earthworks Materials

Sample Number: CP104 @ 3.00-3.45m Classification Type: 1A



BS Test Sieve mm	Percentage Passing %	Table 6/2 Grading Requirements	
		Lower	Upper
500	100		
300	100		
125	100	100	100
90	100		
75	100		
63	100		
37.5	100		
28	98		
20	92		
14	85		
10	72		
6.3	63		
5	59		
3.35	53		
2	48	15	80
1.18	44		
0.6	40		
0.3	33		
0.212	29		
0.15	25		
0.063	21	15	80

Remarks:

SHW Series 600 Table 6/2 :
Class 1A



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UNDRAINED SHEAR STRENGTH IN TRIAXIAL COMPRESSION

WITHOUT MEASUREMENT OF PORE PRESSURE

BS1377 : Part7 : 1990: Clause 9

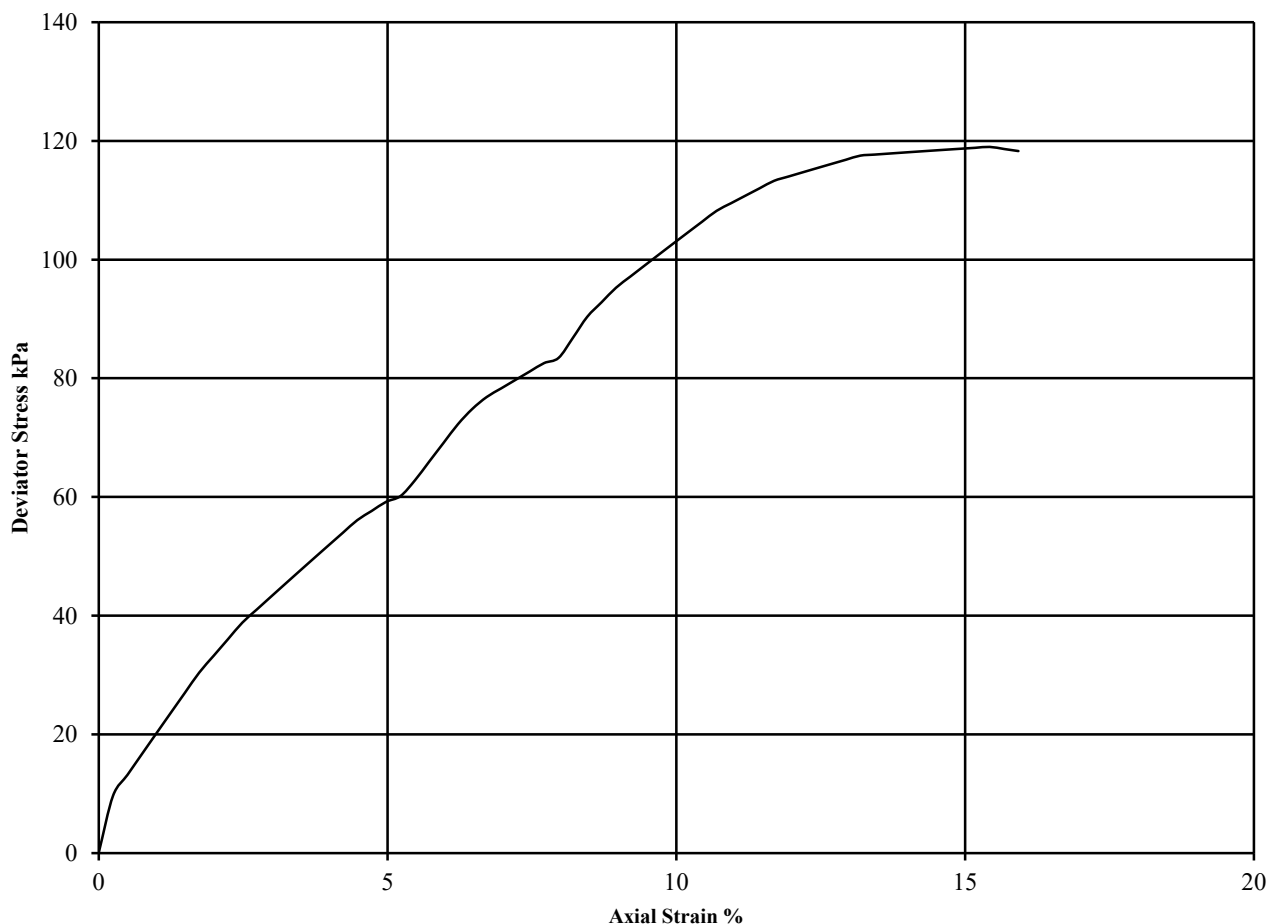
Hole Number: CP104

Top Depth (m): 11.00

Sample Number:

Base Depth (m): 11.45

Sample Type U



Diameter (mm):		103	Height (mm):		207	Test:	UU Multistage		Remarks
Specimen	Moisture Content (%)	Bulk Density (Mg/m ³)	Dry Density (Mg/m ³)	Cell Pressure (kPa)	Corr. Max. Deviator Stress (kPa)	Shear Strength Cu (kPa)	Failure Strain (%)	Mode of Failure	Undisturbed Sample Sample taken from top of tube Rate of strain = 2 %/min Latex Membrane used 0.2 mm thick Membrane Correction applied (kPa) 0.36 0.35 0.34 See summary of soil descriptions
1	23	2.11	1.71	225	60	30	5.2		
				450	83	42	8.0		
				900	119	59	15.4	Plastic	



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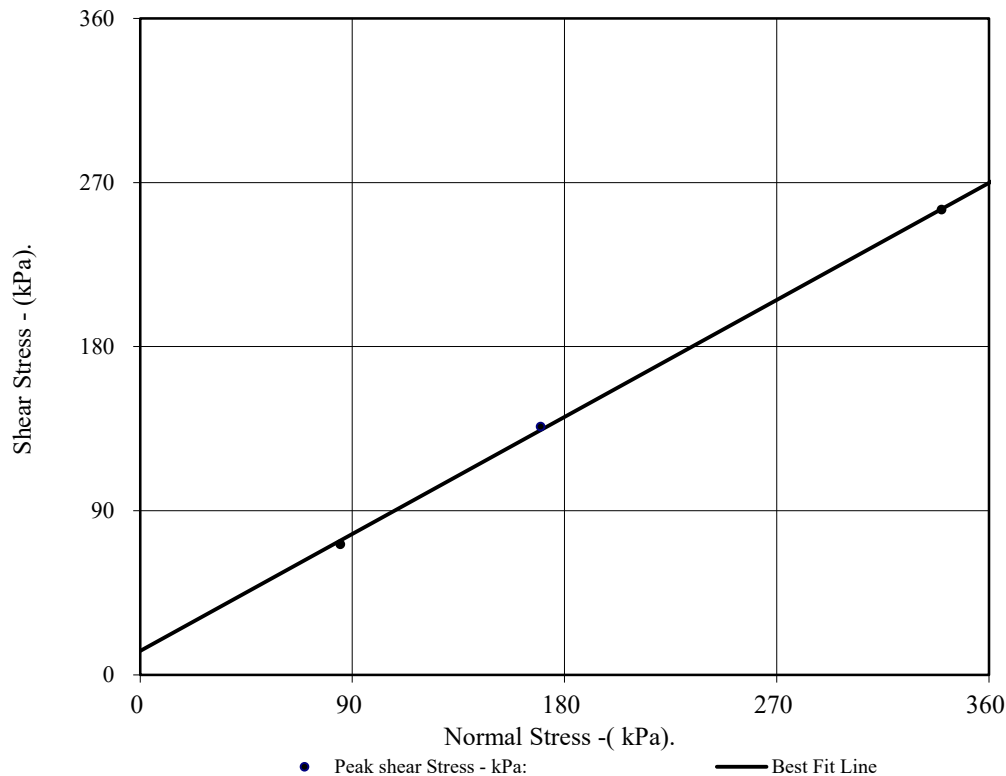
Client Ref:

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CONSOLIDATED DRAINED SHEARBOX TEST

BS1377:Part 7:1990 Clause 4

Hole Number:	CP102		Top Depth:	4.00	
Sample Number:			Base Depth:	4.45	
Sample Conditions:	Submerged		Sample Type	B	
Particle Density - Mg/m3:	2.65	Assumed	Remarks:		
Sample Preparation:	Material tested passing 2mm sieve Remoulded using 2.5kg effort.				
Sample Description:	See summary of soil descriptions.				
STAGE			1	2	3
Initial Conditions					
Height - mm:			20.05	20.05	20.05
Length - mm:			59.97	59.97	59.97
Moisture Content - %:			18	18	18
Bulk Density - Mg/m3:			2.12	1.94	1.94
Dry Density - Mg/m3:			1.80	1.65	1.64
Voids Ratio:			0.473	0.608	0.613
Normal Pressure- kPa			85	170	340
Consolidation Stage					
Consolidated Height - mm:			18.67	18.51	17.88
Shearing Stage					
Rate of Strain - mm/min			0.046	0.046	0.046
Displacement at peak shear stress - mm			3.61	3.91	4.80
Peak shear Stress - kPa:			71	136	255
Final Consolidated Conditions					
Moisture Content - %:			17	16	15
Bulk Density - Mg/m3:			2.28	2.10	2.17
Dry Density - Mg/m3:			1.94	1.82	1.89
Peak					
Angle of Shearing Resistance:(θ)			36		
Effective Cohesion - kPa:			13		



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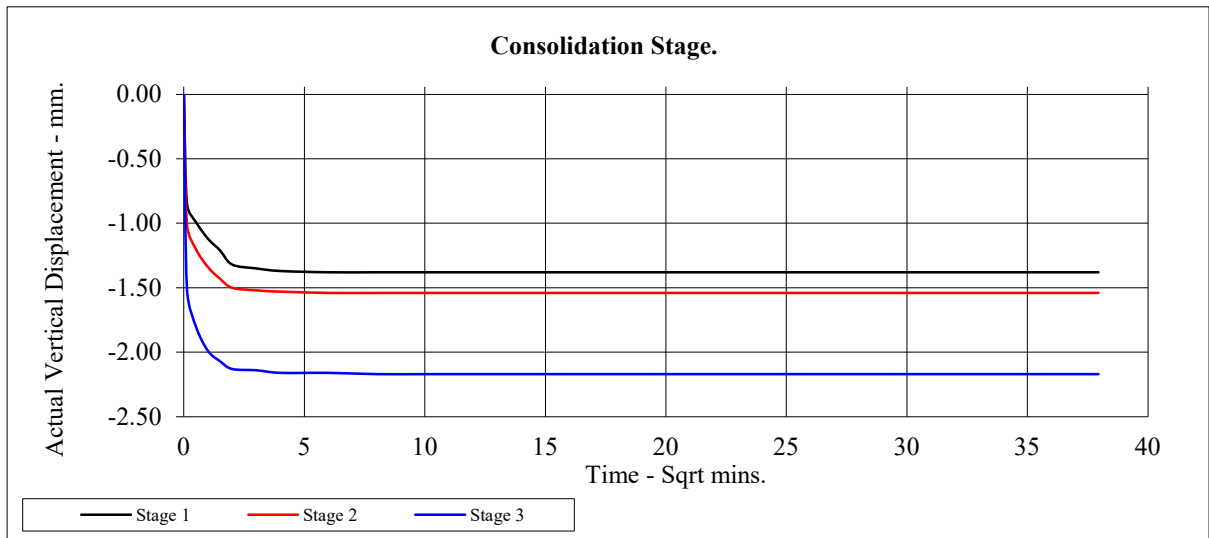
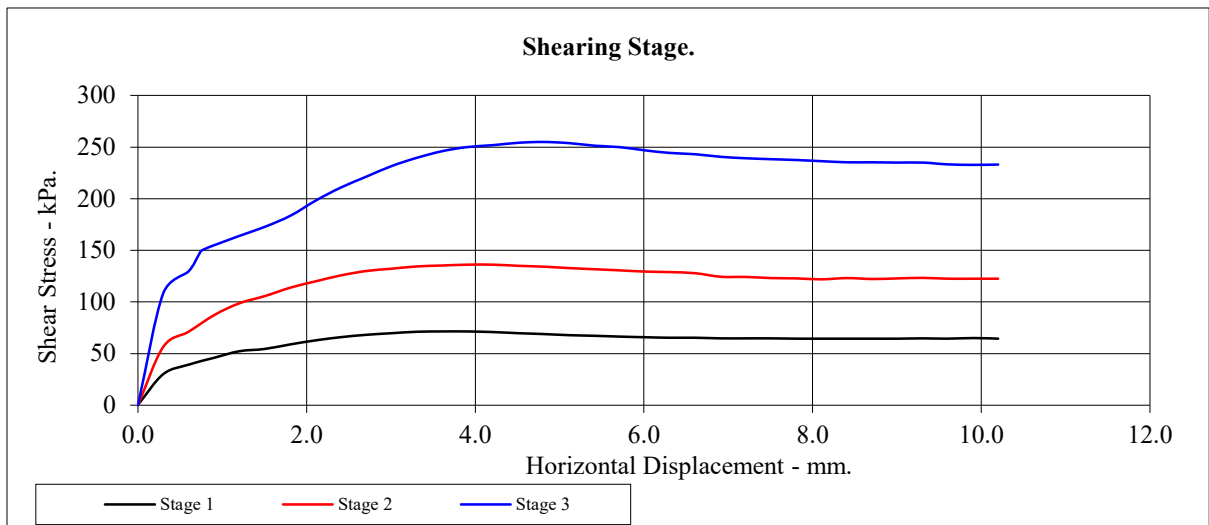
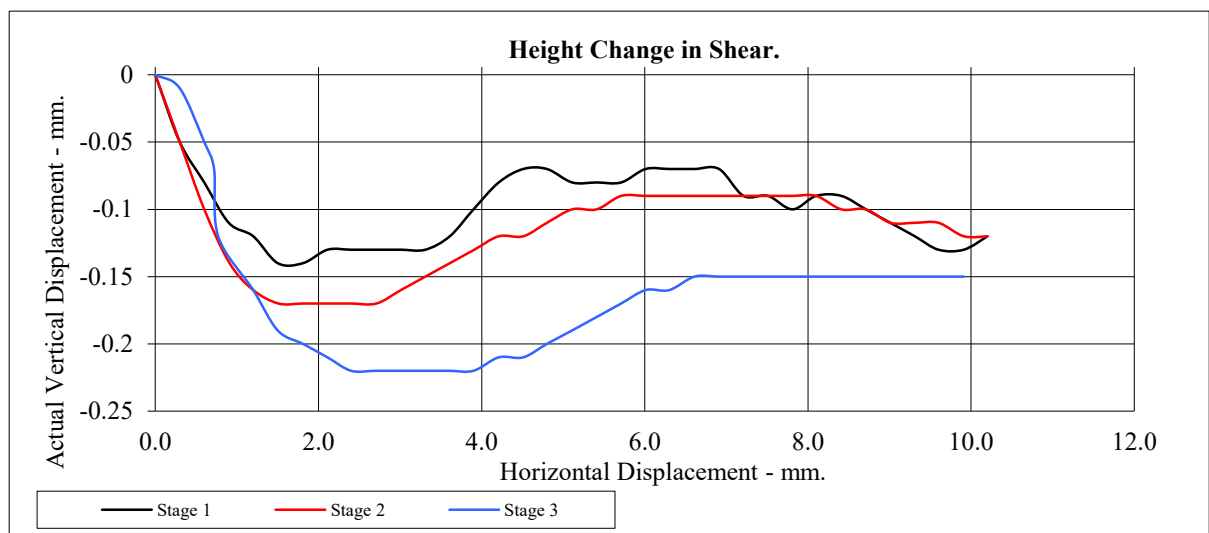
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CONSOLIDATED DRAINED SHEARBOX TEST

BS1377:Part 7:1990 Clause 4

Hole Number:	CP102	Top Depth:	4.00
Sample Number:		Base Depth:	4.45



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