

REMARKS: Test undertaken within M4 Eastbound Avon Abutment Lane 3.



Project Name: SBIM PoW Bridge

Project No:
C8248

Location:	M4 Prince of Wales Bridge
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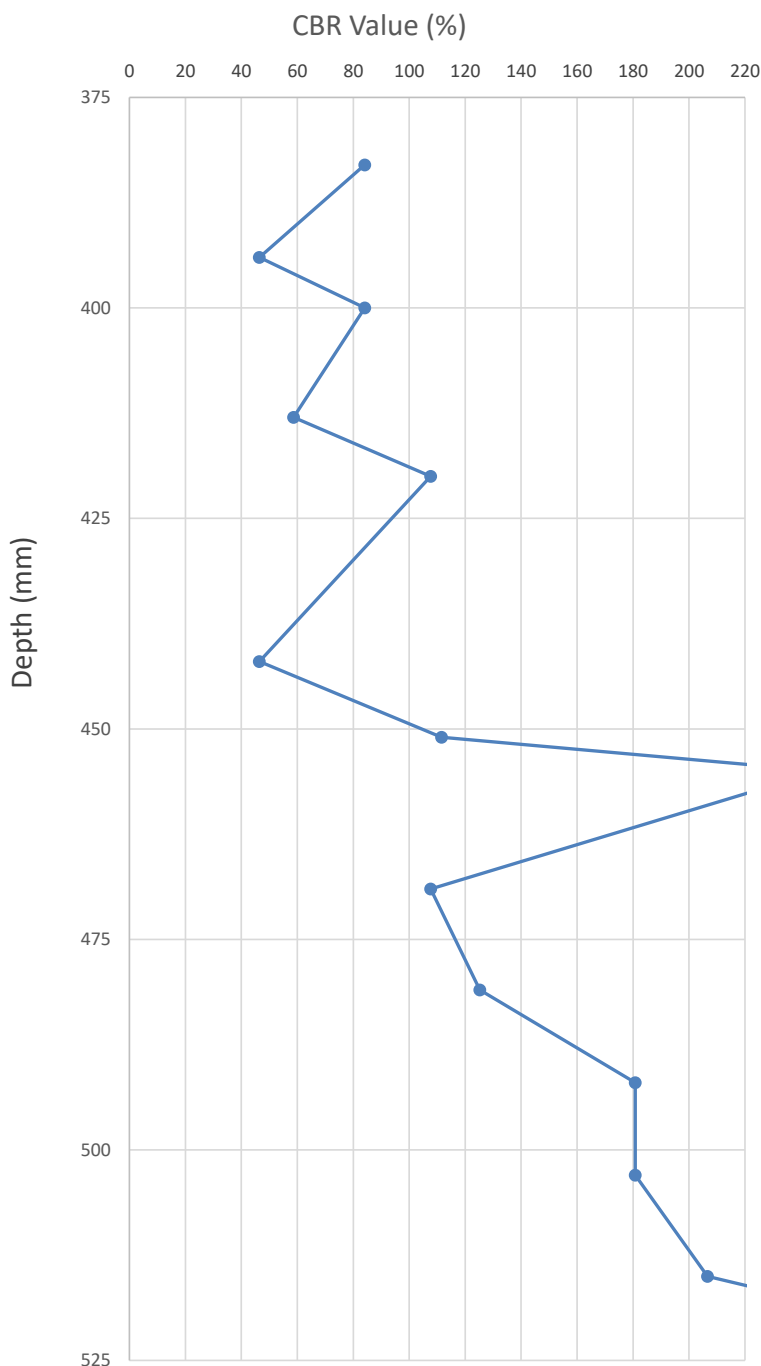
Datum below ground level (bgl) (mm)

380

Client:	Amey
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Initial scale reading (mm)

91

[illegible]

EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

METHOD: TRL DCP testing undertaken from surface 0.380m to 0.523m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP^{-0.98}$.

NOTES: Test refusal is recorded where $<1\text{ mm/blow}$ penetration is measured for 3×10 blows.

Test undertaken on M4 Eastbound Avon Abutment Lane 3.



Project Name: SBIM PoW Bridge

Project No:
C8248

Location:	M4 Prince of Wales Bridge
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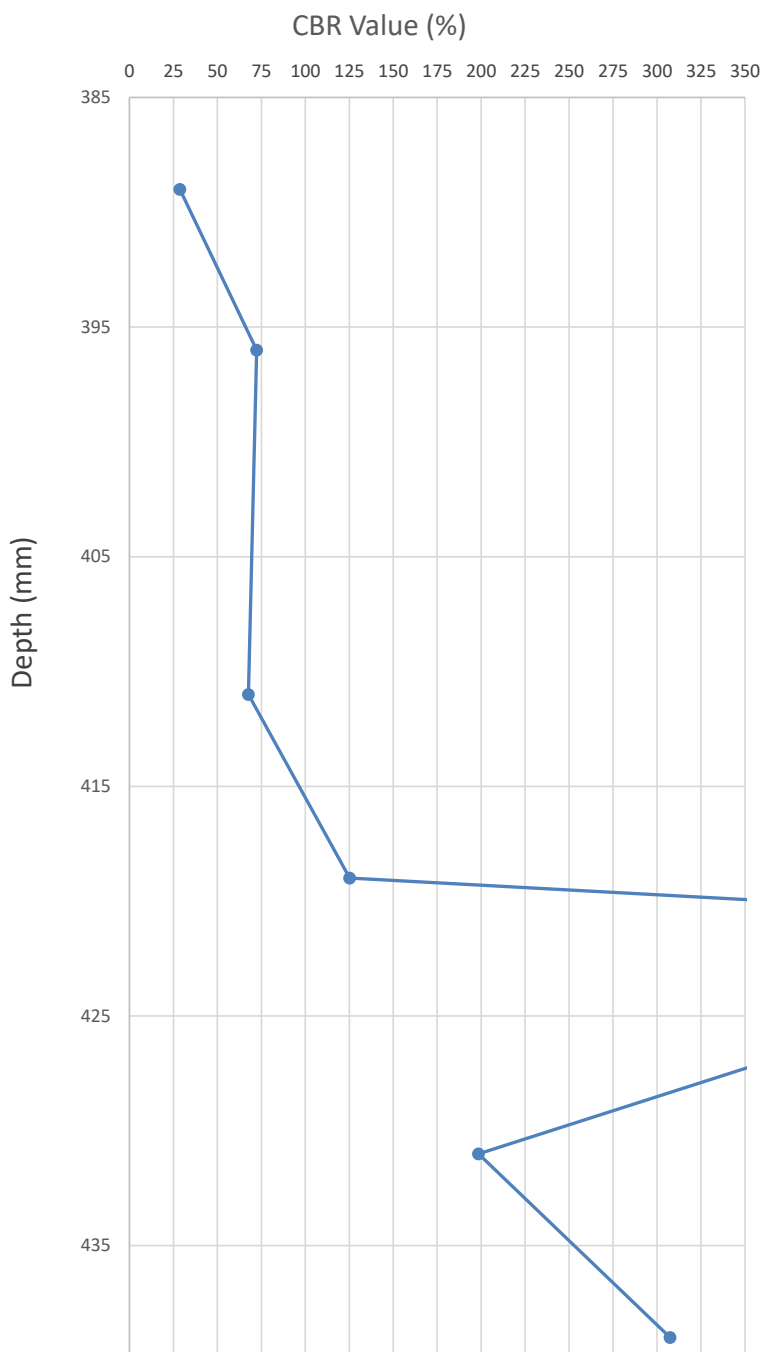
Datum below ground level (bgl) (mm)

380

Client:	Amey
---------	------

Initial scale reading (mm)

94

[illegible]

EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

METHOD: TRL DCP testing undertaken from 0.380 to 0.439m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP^{-0.98}$.

NOTES: Test refusal is recorded where $<1\text{ mm/blow}$ penetration is measured for 3×10 blows.

REMARKS: Test undertaken within M4 Westbound Avon Abutment Lane 3.

CC Ground Investigations Ltd					CC		Location Ref:	
DYNAMIC CONE PENETROMETER TESTING							AA-W07	
							Sheet 1 of 1	
Telephone: 01452 739 165 , Fax: 01452 739 220 , Email: info@CCGround.co.uk						Date		
Project Name: SBIM PoW Bridge				Project No:		14/03/2024		
				C8248				
Location: M4 Prince of Wales Bridge				Datum below ground level (bgl) (mm)		380		
Client: Amey				Initial scale reading (mm)		103		
						Logged By JP		
						Checked By RT		
					CBR Value (%) 0255075100125150175200225250275300 375 385 395 405 415 425 435 445 455 465 Depth (mm)			
Blows (nr)	Scale Reading	Depth BGL (mm)	DCP (mm/blow)	CBR (%)				
1	107	384	4	63.5				
6	120	397	2	115.8				
6	144	421	4	63.5				
6	154	431	2	149.7				
8	163	440	1	220.1				
10	178	455	2	166.0				
10	186	463	1	307.4				
		</						

Telephone: 01452 739 165 , Fax: 01452 739 220 , Email: info@CCGround.co.uk



Location Ref:

AA-W08

Sheet 1 of 1

Date
14/03/2024

Logged By
JP

Checked By
RT

Project Name: SBIM PoW Bridge

Project No:
C8248

Location: M4 Prince of Wales Bridge

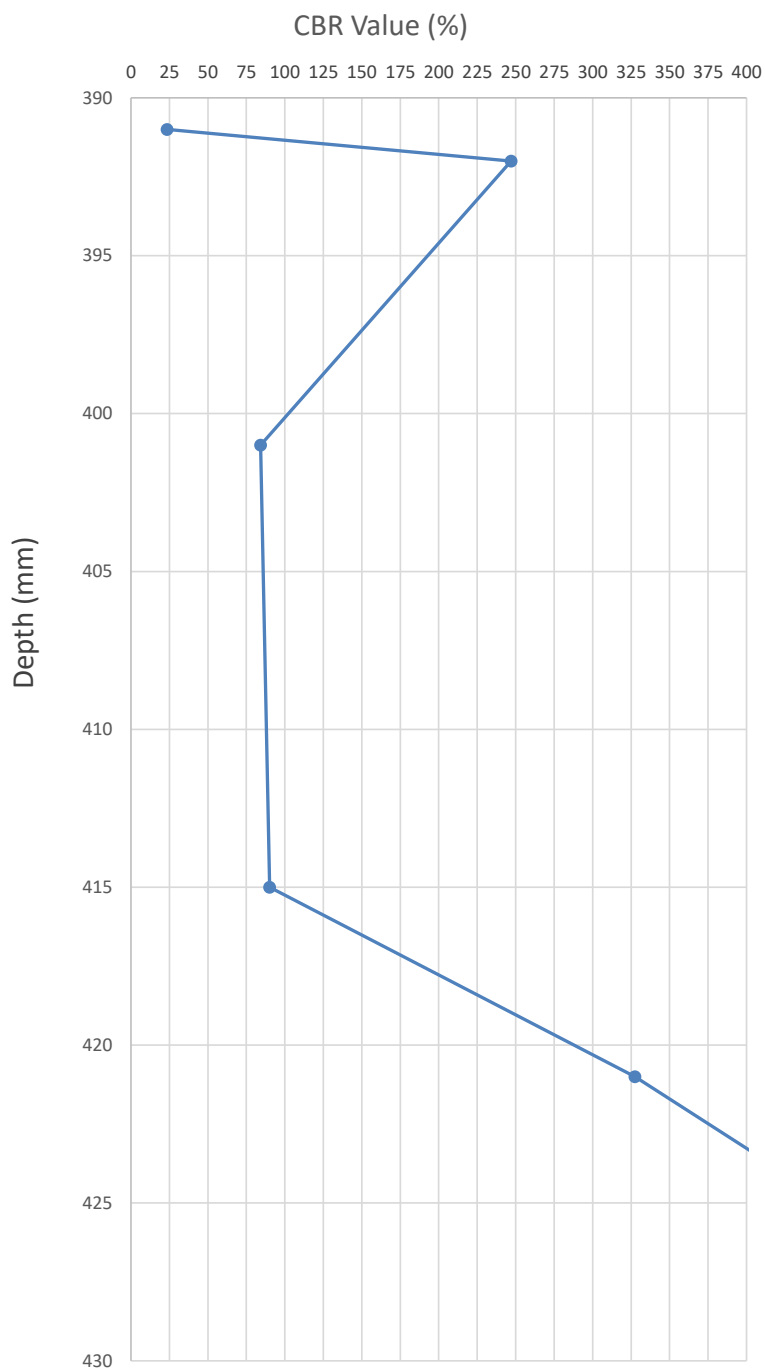
Datum below ground level (bgl) (mm)

380

Client:	Amey
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Initial scale reading (mm)

68

[illegible]

EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

METHOD: TRL DCP testing undertaken from 0.380m to 0.426m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP^{-0.98}$.

NOTES: Test refusal is recorded where <1mm/blow penetration is measured for 3 x 10 blows.

REMARKS: Test undertaken within M4 Westbound Avon Abutment Lane 3.



Telephone: 01452 739 165 , Fax: 01452 739 220 , Email: info@CCGround.co.uk

Project No:
C8248

Date
14/03/2024

Datum below ground level (bgl) (mm)

70

Logged By
JP

Client:	Amey
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Checked By
RT

[illegible]

REMARKS: Test undertaken within M4 Westbound Avon Abutment Central Reservation.

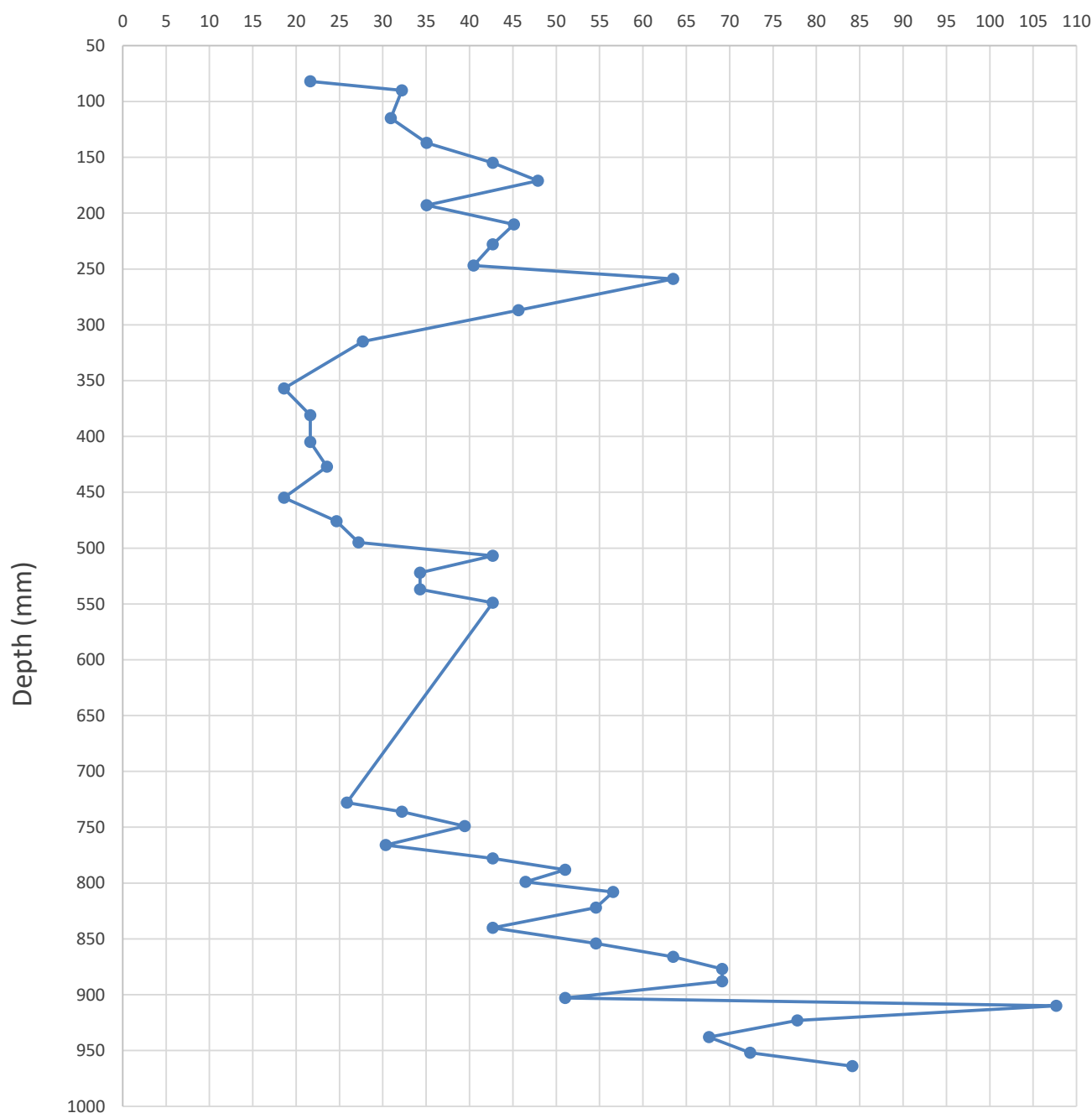
DYNAMIC CONE PENETROMETER TESTING



Telephone: 01452 739 165, Fax: 01452 739 220, Email: info@CCGround.co.uk

Project Name: SBIM PoW Bridge		Project No: C8248		Location Ref: AA-W09
Location: M4 Prince of Wales Bridge		Datum below ground level (bgl) (mm)	70	Sheet 2 of 2
Client: Amey				Date 14/03/2024
				Logged By JP
				Checked By RT

CBR Value (%)



EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

METHOD: TRL DCP testing undertaken from surface 0.070m to 0.964m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP - 0.98$.

REMARKS: Test undertaken within M4 Westbound Avon Abutment Central Reservation.

REMARKS: Test undertaken within M4 Westbound Avon Abutment Lane 3.

REMARKS: Test undertaken within M4 Eastbound Gwent Abutment Lane 3.



Project Name: SBIM PoW Bridge

Project No:
C8248

Date
11/03/24

Location: M4 Prince of Wales Bridge

Datum below ground level (bgl) (mm)

100

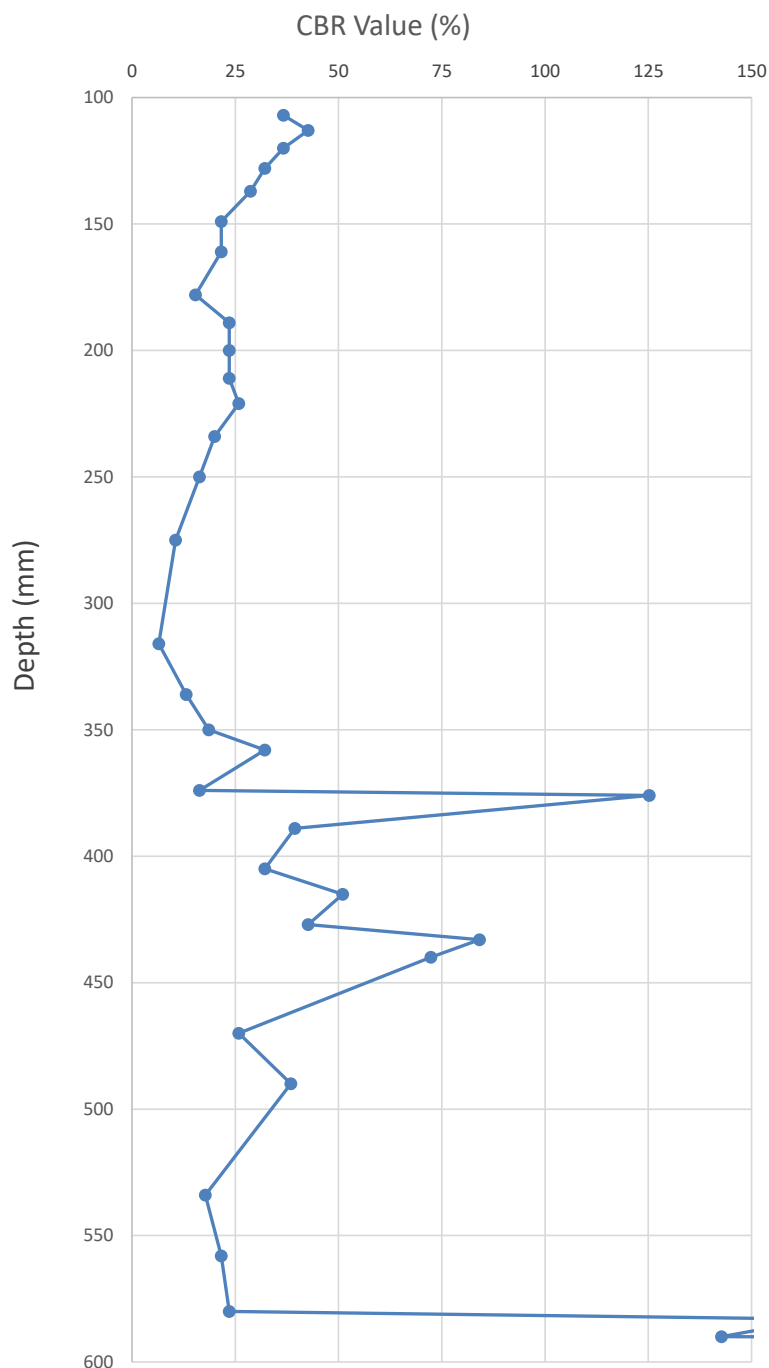
Logged By
JP

Client:	Amey
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Initial scale reading (mm)

130

Checked By
RT

[illegible]

EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

METHOD: TRL DCP testing undertaken from surface 0.100m to 0.593m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP^{-0.98}$.

NOTES: Test refusal is recorded where <1mm/blow penetration is measured for 3 x 10 blows.

REMARKS: Test undertaken within M4 Eastbound Gwent Abutment Central Reservation.



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The graph illustrates the relationship between CBR Value (%) and Depth (mm) for a road project. The CBR value starts at 38.5% at a depth of 385 mm, increases to 65% at 391 mm, and then to 100% at 400 mm. From 400 mm to 410 mm, the CBR value remains constant at 100%. Below 410 mm, the CBR value increases again, reaching 245% at 422.5 mm.

Depth (mm)	CBR Value (%)
385	38.5
391	65
400	100
410	100
422.5	245

REMARKS: Test undertaken within M4 Eastbound Gwent Abutment Lane 3.

REMARKS: Test undertaken within M4 Eastbound Gwent Abutment Central Reservation.

REMARKS: Test undertaken within M4 Eastbound Gwent Abutment Lane 3.

CC Ground Investigations Ltd														Location Ref:					
DYNAMIC CONE PENETROMETER TESTING														GA-E06					
Telephone: 01452 739 165 , Fax: 01452 739 220 , Email: info@CCGround.co.uk														Sheet 1 of 2					
Project Name: SBIM PoW Bridge								Project No: C8248						Date 11/03/2024					
Location: M4 Prince of Wales Bridge								Datum below ground level (bgl) (mm)				100		Logged By JP					
Client: Amey														Checked By RT					
Lead Rod					Extension Rod 1					Extension Rod 2					Extension Rod 3				
Initial reading (mm)			110		Initial reading (mm)			85		Initial reading (mm)					Initial reading (mm)				
Blows (nr)	Scale Reading	Depth BGL (mm)	DCP (mm/blow)	CBR (%)	Blows (nr)	Scale Reading	Depth BGL (mm)	DCP (mm/blow)	CBR (%)	Blows (nr)	Scale Reading	Depth BGL (mm)	DCP (mm/blow)	CBR (%)	Blows (nr)	Scale Reading	Depth BGL (mm)	DCP (mm/blow)	CBR (%)
1	121	111	11	23.6	1	103	862	18	14.5										
1	126	116	5	51.0	1	128	887	25	10.5										
1	134	124	8	32.2	1	145	904	17	15.4										
2	147	137	7	39.4	1	170	929	25	10.5										
2	160	150	7	39.4	1	183	942	13	20.0										
2	172	162	6	42.7	1	204	963	21	12.5										
2	190	180	9	28.7	1	210	969	6	42.7										
3	200	190	3	75.9	1	214	973	4	63.5										
3	217	207	6	45.1	1	225	984	11	23.6										
3	241	231	8	32.2	2	239	998	7	36.7										
3	257	247	5	47.9	3	254	1013	5	51.0										
3	280	270	8	33.6	3	270	1029	5	47.9										
3	307	297	9	28.7	3	295	1054	8	30.9										
3	340	330	11	23.6	3	321	1080	9	29.8										
2	355	345	8	34.3	3	345	1104	8	32.2										
2	372	362	9	30.3	3	368	1127	8	33.6										
2	381	371	5	56.6	3	384	1143	5	47.9										
2	393	383	6	42.7															
2	406	396	7	39.4															
2	425	415	10	27.2															
3	440	430	5	51.0															
3	458	448	6	42.7															
3	474	464	5	47.9															
3	495	485	7	36.7															
3	510	500	5	51.0															
3	530	520	7	38.5															
3	547	537	6	45.1															
3	562	552	5	51.0															
3	584	574	7	35.1															
3	630	620	15	17.0															
2	645	635	8	34.3															
2	663	653	9	28.7															
2	680	670	9	30.3															
2	713	703	17	15.8															
2	750	740	19	14.2															
2	772	762	11	23.6															
2	813	803	21	12.8															
2	854	844	21	12.8															
		844					1143					0					0		
EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).																			
METHOD: TRL DCP testing undertaken from surface 0.100m to 1.143m.																			
REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): CBR = 247DCP-0.98.																			
REMARKS: Test undertaken within M4 Eastbound Gwent Abutment Central Reservation.																			

DYNAMIC CONE PENETROMETER TESTING

Location Ref:

GA-E06

Sheet 2 of 2

Telephone: 01452 739 165 , Fax: 01452 739 220 , Email: info@CCGround.co.uk

Project Name: SBIM PoW Bridge

Project No:
C8248Date
11/03/2024

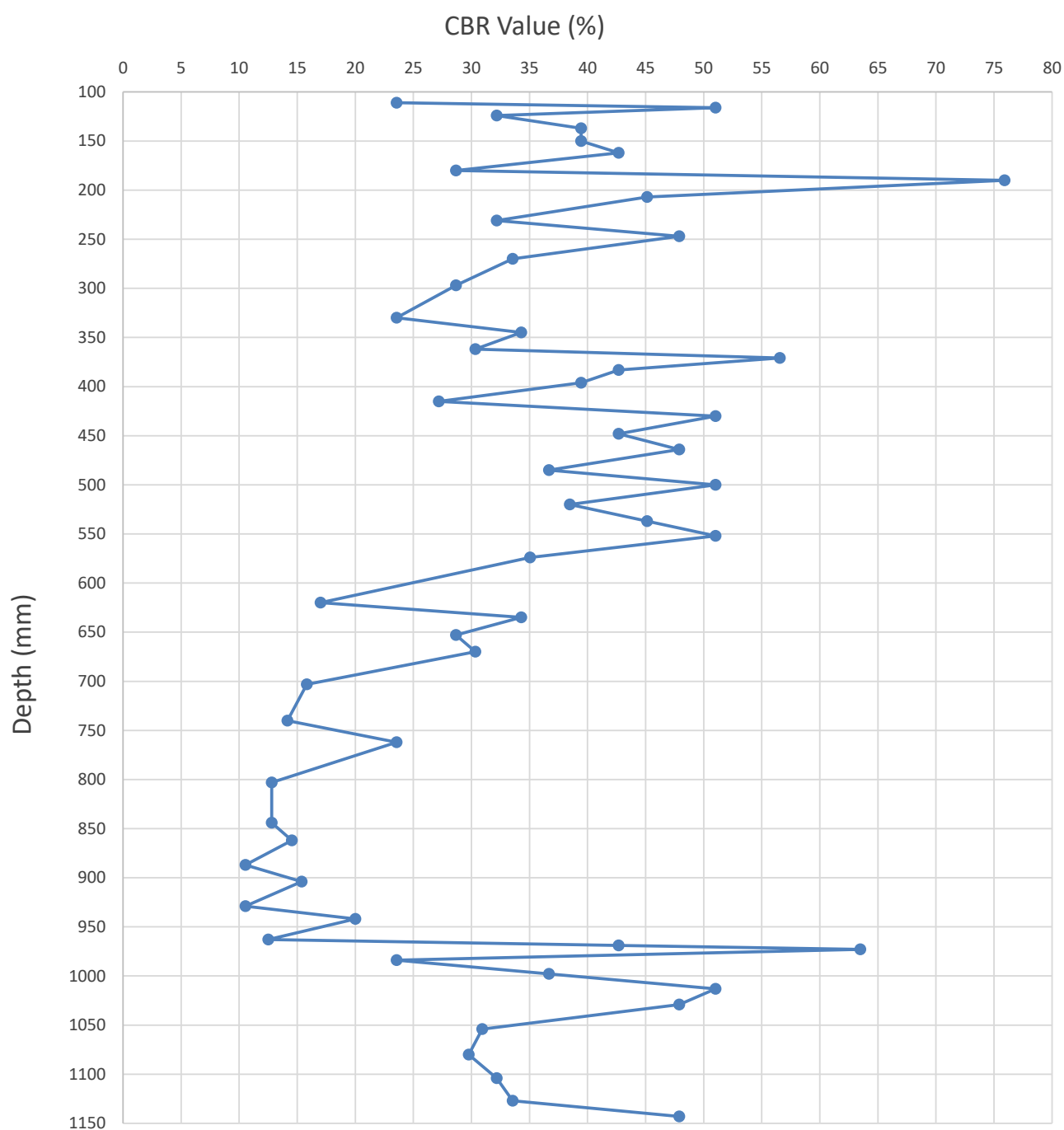
Location: M4 Prince of Wales Bridge

Datum below ground
level (bgl) (mm)

100

Logged By
JP

Client: Amey

Checked By
RT

EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

METHOD: TRL DCP testing undertaken from surface 0.100m to 1.143m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP-0.98$.

REMARKS: Test undertaken within M4 Eastbound Gwent Abutment Central Reservation.

REMARKS: Test undertaken within M4 Eastbound Gwent Abutment Lane 3.



Telephone: 01452 739 165 , Fax: 01452 739 220 , Email: info@CCGround.co.uk

Location Ref:

GA-E08

Sheet 1 of 2

Project Name: SBIM PoW Bridge

Project No:
C8248

Date
11/03/2024

Location:	M4 Prince of Wales Bridge
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Datum below ground level (bgl) (mm)

100

Logged By
JP

Client:	Amey
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Checked By
RT

[illegible]

EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

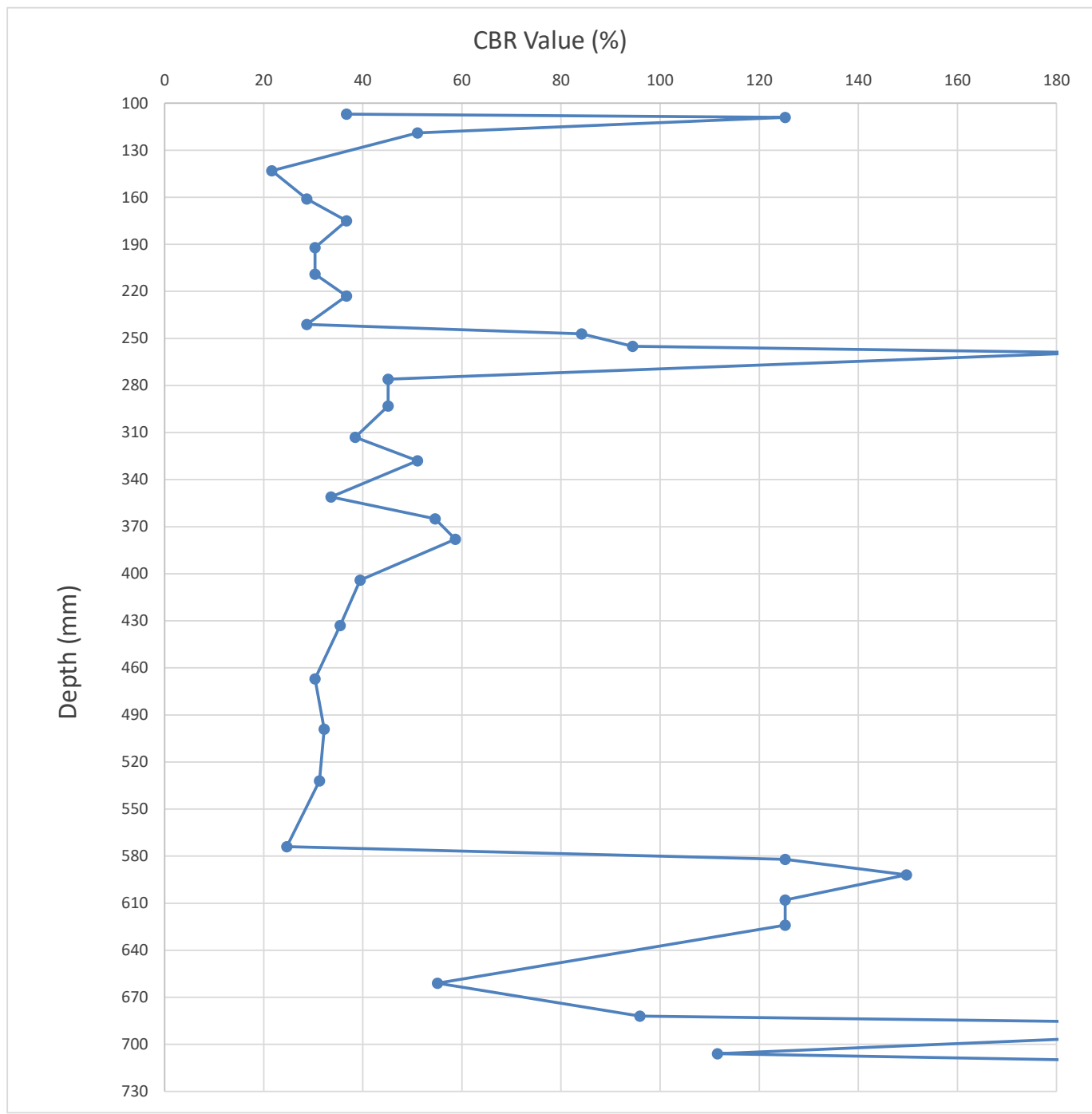
METHOD: TRL DCP testing undertaken from surface 0.100m to 0.715m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP - 0.98$.

NOTES: Test refusal is recorded where <1mm/blow penetration is measured for 3 x 10 blows.

REMARKS: Test undertaken within M4 Eastbound Gwent Abutment Central Reservation.

CC Ground Investigations Ltd			Location Ref:
DYNAMIC CONE PENETROMETER TESTING			GA-E08
			Sheet 2 of 2
Telephone: 01452 739 165 , Fax: 01452 739 220 , Email: info@CCGround.co.uk			
Project Name: SBIM PoW Bridge		Project No: C8248	Date 11/03/2024
Location: M4 Prince of Wales Bridge		Datum below ground level (bgl) (mm)	100
Client: Amey			Logged By JP Checked By RT



EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

METHOD: TRL DCP testing undertaken from surface 0.100m to 0.715m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP-0.98$.

NOTES: Test refusal is recorded where <1mm/blow penetration is measured for 3 x 10 blows.

REMARKS: Test undertaken within M4 Eastbound Gwent Abutment Central Reservation.

REMARKS: Test undertaken within M4 Eastbound Gwent Abutment Lane 3.

DYNAMIC CONE PENETROMETER TESTING

Location Ref:

GA-E09

Sheet 2 of 2

Telephone: 01452 739 165 , Fax: 01452 739 220 , Email: info@CCGround.co.uk

Project Name: SBIM PoW Bridge

Project No:
C8248Date
12/03/2024

Location: M4 Prince of Wales Bridge

Datum below ground
level (bgl) (mm)

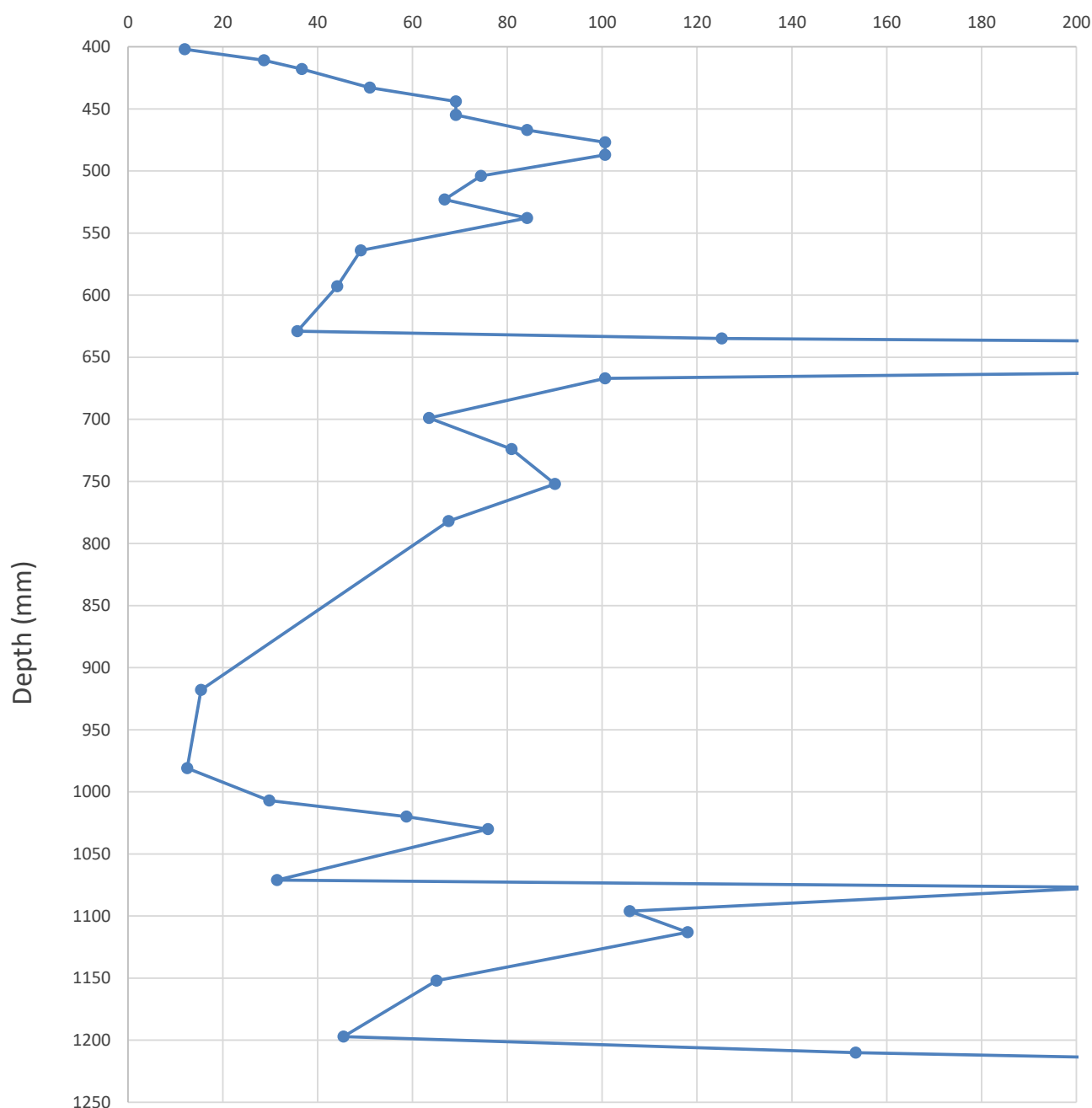
380

Logged By
JP

Client: Amey

Checked By
RT

CBR Value (%)



EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

METHOD: TRL DCP testing undertaken from surface 0.380m to 1.219m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP-0.98$.

REMARKS: Test undertaken within M4 Eastbound Gwent Abutment Lane 3.



Date
13/03/2024

100

Logged By
JP

Client:	Amey
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Checked By
RT

[illegible]

REMARKS: Test undertaken within M4 Westbound Gwent Abutment Central Reservation.

DYNAMIC CONE PENETROMETER TESTING

Location Ref:

GA-W11

Sheet 2 of 2

Telephone: 01452 739 165 , Fax: 01452 739 220 , Email: info@CCGround.co.uk

Project Name: SBIM PoW Bridge

Project No:
C8248Date
13/03/2024

Location: M4 Prince of Wales Bridge

Datum below ground
level (bgl) (mm)

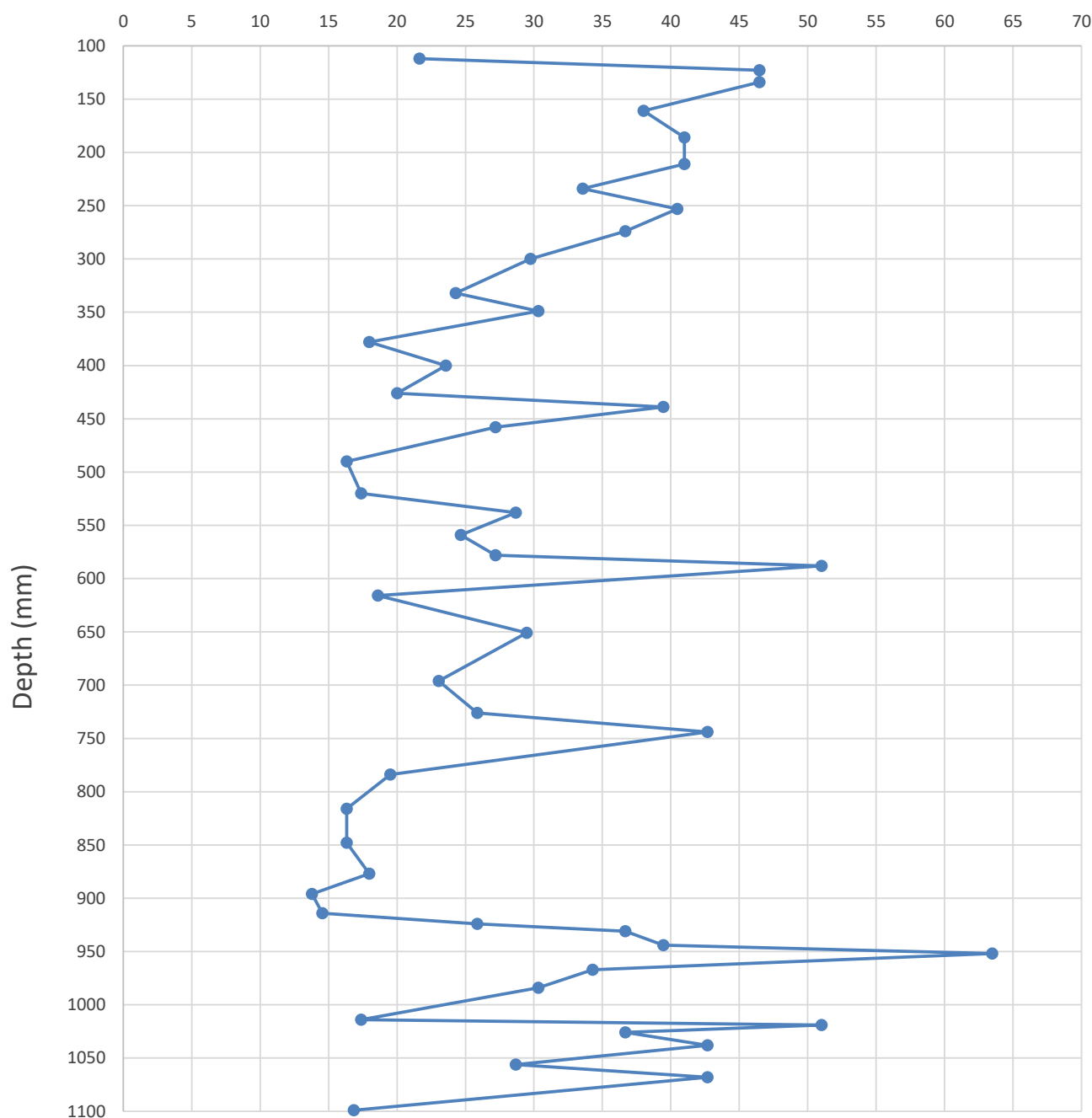
100

Logged By
JP

Client: Amey

Checked By
RT

CBR Value (%)



EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

METHOD: TRL DCP testing undertaken from surface 0.100m to 1.099m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP \cdot 0.98$.

REMARKS: Test undertaken within M4 Westbound Gwent Abutment Central Reservation.

REMARKS: Test undertaken within M4 Westbound Gwent Abutment Central Reservation.



Telephone: 01452 739 165 , Fax: 01452 739 220 , Email: info@CCGround.co.uk

Project No:
C8248

Date
13/03/2024

Datum below ground level (bgl) (mm)

100

Logged By
JP

Client:	Amey
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Checked By
RT

[illegible]

REMARKS: Test undertaken within M4 Westbound Gwent Abutment Lane 3.

DYNAMIC CONE PENETROMETER TESTING



Telephone: 01452 739 165 , Fax: 01452 739 220 , Email: info@CCGround.co.uk

Location Ref:

GA-W14

Sheet 2 of 2

Project Name: SBIM PoW Bridge

Project No:
C8248Date
13/03/2024

Location: M4 Prince of Wales Bridge

Datum below ground
level (bgl) (mm)

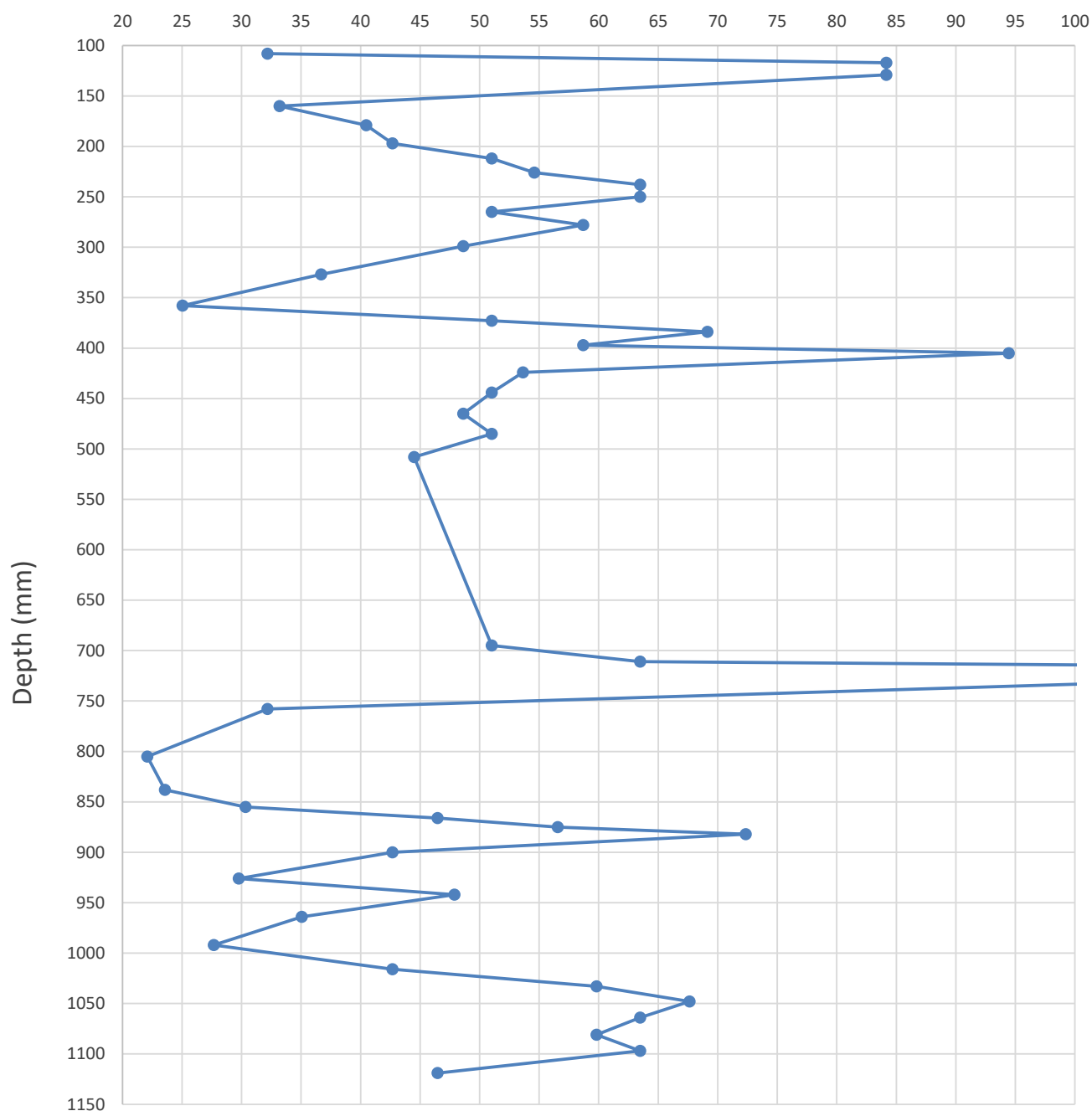
100

Logged By
JP

Client: Amey

Checked By
RT

CBR Value (%)



EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

METHOD: TRL DCP testing undertaken from surface 0.100m to 1.119m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP \cdot 0.98$.

REMARKS: Test undertaken within M4 Westbound Gwent Abutment Lane 3.



Project Name: SBIM PoW Bridge

Project No:

C8248

Date _____

13/03/2024

Location:	M4 Prince of Wales Bridge
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Datum below ground level (bgl) (mm)

80

Logged By

JP

checked

Client:	Amey
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Checked By

RT

[illegible]

EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

METHOD: TRL DCP testing undertaken from surface 0.080m to 1.173m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP - 0.98$.

REMARKS: Test undertaken within M4 Westbound Gwent Abutment Lane 3.

DYNAMIC CONE PENETROMETER TESTING



Telephone: 01452 739 165 , Fax: 01452 739 220 , Email: info@CCGround.co.uk

Location Ref:

GA-W16

Sheet 2 of 2

Project Name: SBIM PoW Bridge

Project No:
C8248Date
13/03/2024

Location: M4 Prince of Wales Bridge

Datum below ground
level (bgl) (mm)

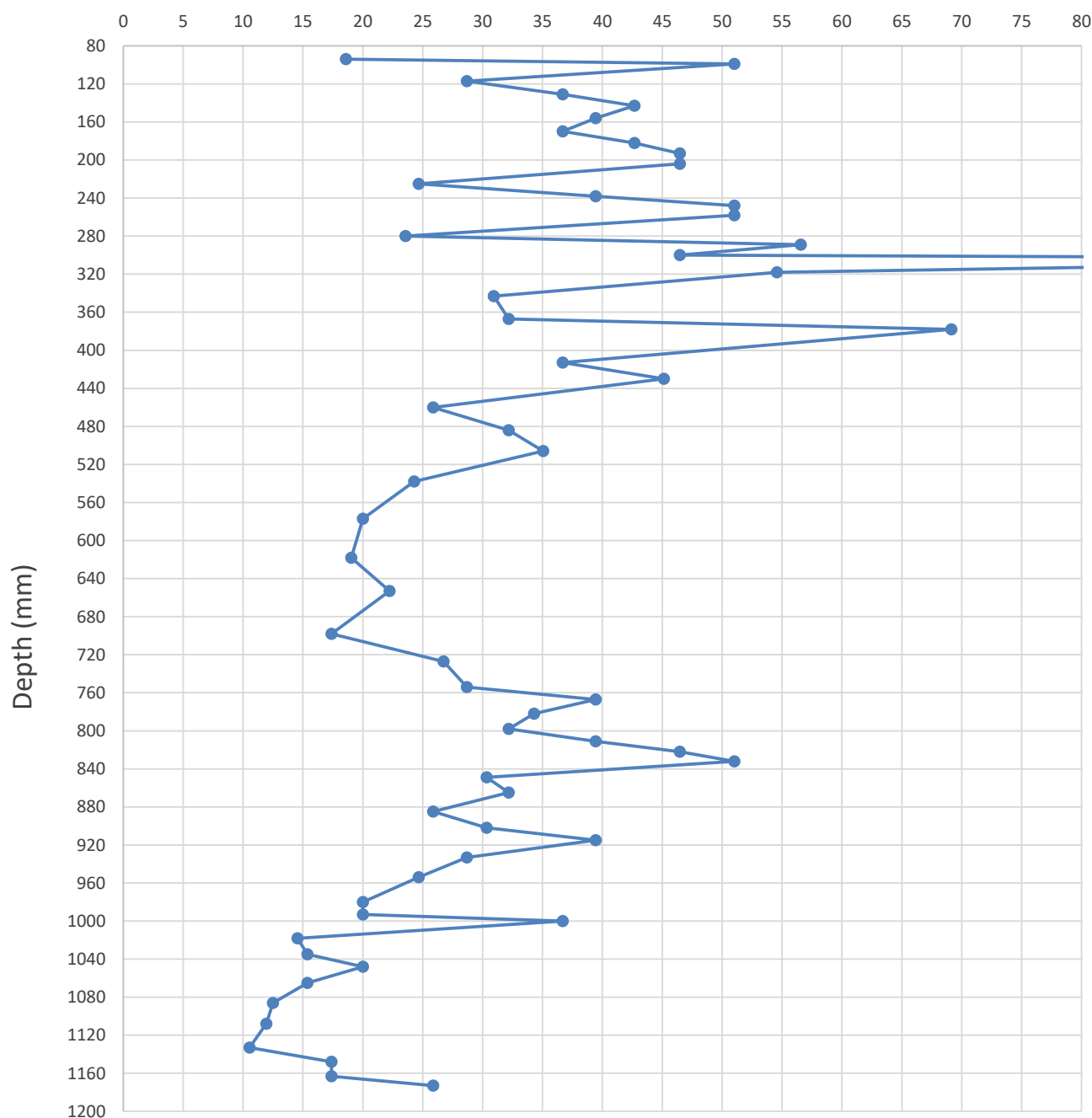
80

Logged By
JP

Client: Amey

Checked By
RT

CBR Value (%)



EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

METHOD: TRL DCP testing undertaken from surface 0.080m to 1.173m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP - 0.98$.

REMARKS: Test undertaken within M4 Westbound Gwent Abutment Lane 3.

REMARKS: Test undertaken within M4 Westbound Gwent Abutment Central Reservation.



Project Name: SBIM PoW Bridge

Project No:
C8248

Date
13/03/2024

Location:	M4 Prince of Wales Bridge
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Datum below ground level (bgl) (mm)

100

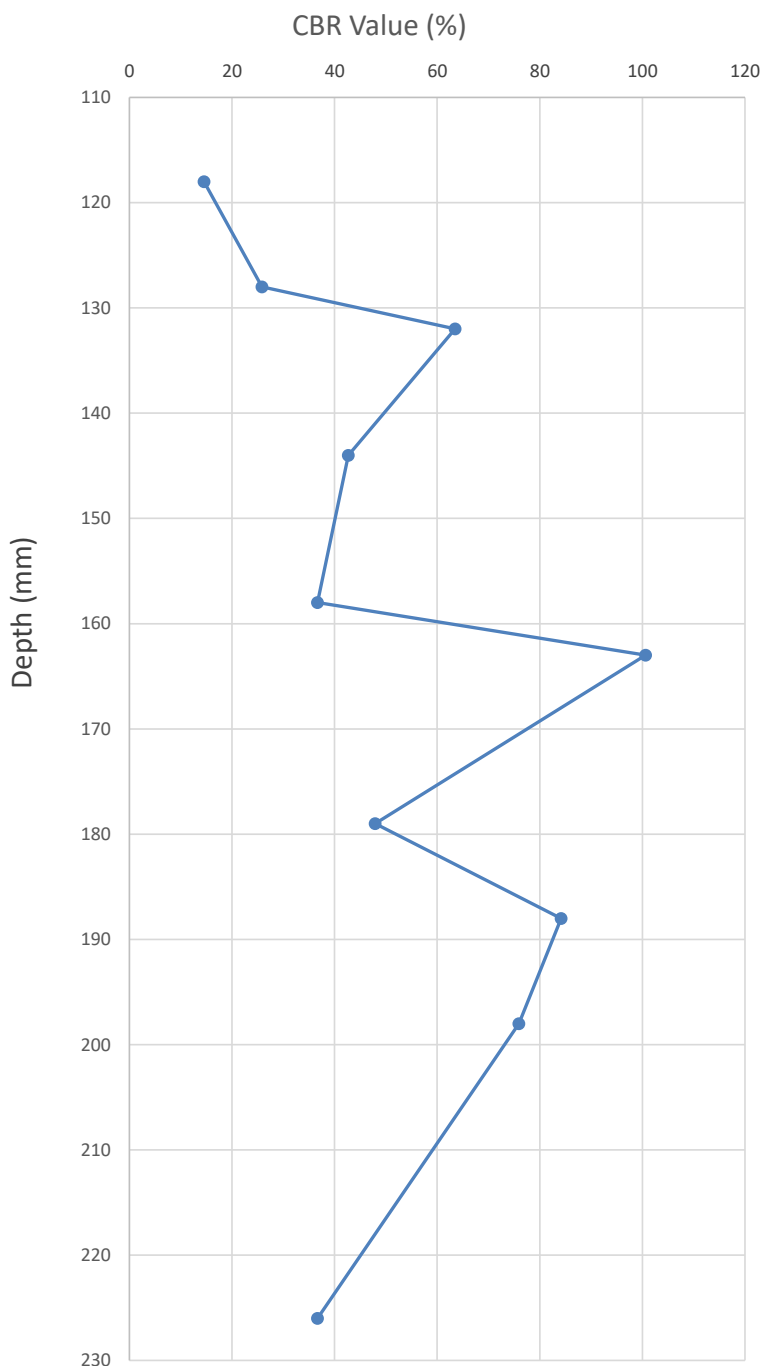
Logged By
JP

Client:	Amey
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Initial scale reading (mm)

92

Checked By
RT

[illegible]

EQUIPMENT: Transport Research Laboratory Dynamic Cone Penetrometer (TRL-DCP).

METHOD: TRL DCP testing undertaken from surface 0.10m to 0.226m.

REMARKS: CBR correlation based on correlation from Figure 4 of TRL Report TRL587 (2003): $CBR = 247DCP^{-0.98}$.

NOTES: Test abandoned due to DCP being kicked off at an angle on a cobble or gravel.

REMARKS: Test undertaken within M4 Westbound Gwent Abutment Lane 3.