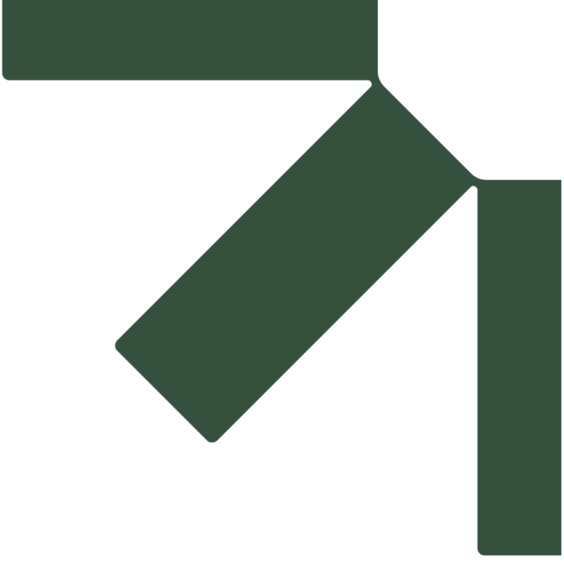




Appendix C Geotechnics Ltd Ground Investigation Records

Flood Consequence Assessment

Proposed extension of the Margam Substation

BakerHicks Limited

SLR Project No.: 402.065363.00001

26 August 2025

APPENDIX 4

Borehole Records

©

GO TO PAGE

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH101
Client	National Grid	National Grid Coordinates	378492.7 E 186568.4 N	Ground Level	3.36 m OD

Sampling			Properties		Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)	
0.10 - 0.30	B				TOPSOIL: Grass over soft dark brown slightly sandy clay with occasional rootlets and roots up to 8mm in diameter.				
0.20	D					0.30			3.06
0.25	ES				Soft grey mottled brown slightly sandy CLAY with occasional roots up to 10mm in diameter.				
0.25			PID: <0.1 ppm		Below 0.50m, roots absent.				
0.25	HV								
0.40 - 0.80	B								
0.50	D		w: 24 %						
0.50	ES					1.20			2.16
0.50			PID: <0.1 ppm		Very soft grey slightly sandy CLAY with occasional pockets (up to 10mm in size) of organic material.				
0.60	HV								
1.00	D								
1.00	ES								
1.00			PID: <0.1 ppm						
1.20 - 1.65		1.20 (0.80)		S0*/450mm					
1.20 - 1.65	D								
1.20 - 2.20	B								
1.80	D		w: 77 %						
2.20 - 2.65	UT	2.20 (DRY)	6 blows						
2.20 - 2.65			cu: 16 kPa						
2.50 - 3.20	B								
2.65 - 2.80	D								
3.00	D		w: 80 %						
3.20 - 3.65		3.20 (DRY)		S1					
3.20 - 3.65	D					3.80			-0.44
3.80 - 4.20	B				Very dense dark brown sandy GRAVEL with a low cobble content of subrounded sandstone. Gravel is subangular to subrounded fine to coarse sandstone and quartzite.				
4.00	D								
4.20 - 4.34		4.20 (1.20)		C50/70mm					
4.20 - 5.20	B								
5.00	D								
5.20 - 5.65		5.20 (-0.14)		C38	At 5.20m, dense.				
5.20 - 6.00	B								
6.10	D								
6.30 - 6.64		6.20 (0.00)		C50/190mm					
6.30 - 7.00	B								
6.80	D								
7.10 - 7.44		7.00 (0.00)		C50/190mm					
7.10 - 8.00	B								
7.50	D								
8.00 - 8.37		8.00 (0.00)		C50/220mm					
8.00 - 8.80	B								
8.60	D								
9.10 - 9.55		9.10 (0.00)		C39	At 9.10m, dense.				
9.10 - 10.00	B								
9.80	D								
10.00 - 10.45		10.00 (0.00)		C42					

Boring				Progress				Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed
1.20	0.30	Inspection Pit	MR/SS	0.00			12/08/24	08:00	1.00		0.80	20	
14.70	0.20	Cable Percussion	MR/SS	7.00	7.00	0.00	12/08/24	18:00	4.00	4.00	1.20	20	
15.00	0.12	Rotary Open Hole	CJ/IJ	7.00	7.00	0.00	13/08/24	08:00	5.20	5.20	-0.14	30	
25.00	0.12	Rotary Core	CJ/IJ	14.85	14.70	11.10	13/08/24	18:00	18.00	15.00	1.40	20	

Remarks	AGS Inspection pit hand excavated to 1.20m depth and no services were found. Chiselling: 6.50-6.70m for 30 minutes & 8.50-8.80m for 40 minutes. Artesian water noted at 5.20mbgl. ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub. At 14.50m, water level rose to 0.49m in 10mins. Rotary casing installed. Flush:Air/Mist	Logged by	SI
Symbols and abbreviations are explained on the accompanying key sheets. All dimensions are in metres.	Figure	Sheet 1 of 4	05/02/2025
Logged in accordance with BS5930:2015 + A1:2020			
G GEOTECHNICS			

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH101
Client	National Grid	National Grid Coordinates	378492.7 E 186568.4 N	Ground Level	3.36 m OD

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
10.20 - 11.50	B	11.50 (10.40)	w: 16 %	S41	Very stiff dark brown and dark grey slightly sandy slightly gravelly CLAY with a low cobble content of subangular sandstone. Gravel is angular to subangular fine to coarse sandstone.	10.20		-6.84
11.00	D							
11.50 - 11.95								
11.50 - 11.95	D							
12.10 - 13.50	B	12.00 (11.20)		S50/ 190mm	Extremely weak brownish grey MUDSTONE, possibly interbedded and extremely weak SANDSTONE,	12.10		-8.74
13.00	D							
13.50 - 13.84								
13.50 - 13.84	D				Extremely weak grey MUDSTONE, recovered as clayey gravel.	13.60		
13.60 - 14.50	B	12.00 (11.10)		S50/ 75mm				-10.24
14.00	D							
14.60	D				Extremely weak black COAL.	14.50		
14.70 - 14.85					Borehole continued using alternative techniques - see next page			
14.70 - 14.85	D							

Boring				Progress				Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed
				14.85	14.70	-0.70	27/08/24	08:00					
				22.50	15.00	1.10	27/08/24	17:00					
				22.50	15.00	0.00	28/08/24	08:00					
				25.00	15.00		28/08/24	16:40					

Project	National Grid - 101677 Margam TATA Steel Connection			Engineer	Baker Hicks			Project No.	PC248745 - Phase 1																				
Client	National Grid			National Grid Coordinates	378492.7 E 186568.4 N			Borehole	BH101																				
								Ground Level	3.36 m OD																				
Sampling/Testing				Drilling				Strata				Scale 1:50																	
Sample / SPT Depth		SPT N / Type		Core Run/Depth (Core Dia/Time)		Depth Cased & (to Water)		TCR/ SCR (%)		RQD (%)		FI		General		Detail		Depth		Legend		Level (m OD)							
16.28 - 16.40		C		15.00 - 16.50		15.00		80 33		10		AZCL		Extremely weak black COAL.				14.85				-11.49							
16.90 - 16.99		C		16.50 - 18.00		15.00		100 93		13		9		Medium strong grey SILTSTONE with occasional very strong sandstone layers. Discontinuities are subhorizontal (0-15 degrees), very closely and closely spaced, stepped, rough and clean.		Between 15.00m - 15.30m. assumed zone of core loss. Between 15.30m - 15.50m, non-intact, recovered as angular to subangular fine to coarse gravel of very strong light grey sandstone, quartzite and coal. Between 15.50m - 15.70m, with numerous plant fossils. Between 15.70m - 15.92m, 16.15m - 16.28m and 16.35m - 16.50m, non-intact, recovered as angular and subangular fine to coarse gravel. Between 16.90m - 17.00m. very strong sandstone layer.		16.90				-13.54							
18.81 - 18.91		C		18.00 - 19.50		15.00		97 60		47		8		Strong to very strong dark grey SILTSTONE with gypsum veins up to (2mm thick). Discontinuities are generally inclined at (15 degrees), very closely and closely spaced, plannar, stepped, smooth and clean		Between 17.90m - 18.22m. very strong sandstone with occasional gypsum and pyrite veins up to (1mm thick) with discontinuities subhorizontal, stepped and rough. Between 18.22m - 18.36m. non-intact recovered as angular to subangular fine to coarse gravel. Between 19.62m - 19.72m, non-intact, recovered as angular to subangular fine to coarse gravel. Between 19.76m - 19.90m. very strong sandstone layer.		18.36				-15.00							
				19.50 - 21.00		15.00		99 87		60		NI																	
Boring				Progress				Groundwater																					
Depth		Hole Dia.		Technique		Crew		Depth of Hole		Depth Cased		Depth to Water		Date		Time		Depth Struck		Depth Cased		Rose to		in Mins		Depth Sealed		Remarks on Groundwater	
1.20		0.30		Inspection Pit		MR/SS		0.00						12/08/24		08:00		1.00				0.80		20				Artesian	
14.70		0.20		Cable Percussion		MR/SS		7.00		7.00		0.00		12/08/24		18:00		4.00		4.00		1.20		20					
15.00		0.12		Rotary Open Hole		CJ/IJ		7.00		7.00		0.00		13/08/24		08:00		5.20		5.20		-0.14		30					
25.00		0.12		Rotary Core		CJ/IJ		14.85		14.70		11.10		13/08/24		18:00		18.00		15.00		1.40		20					
Remarks				Inspection pit hand excavated to 1.20m depth and no services were found. Chiselling: 6.50-6.70m for 30 minutes & 8.50-8.80m for 40 minutes. Artesian water noted at 5.20mbgl. ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub. At 14.50m, water level rose to 0.49m in 10mins. Rotary casing installed. Flush:Air/Mist												Logged by				SI									
Symbols and abbreviations are explained on the accompanying key sheets. All dimensions are in metres.				Logged in accordance with BS5930:2015 + A1:2020												Figure				Sheet 3 of 4 05/02/2025									

Project	National Grid - 101677 Margam TATA Steel Connection	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Client		National Grid		National Grid Coordinates
				Ground Level	3.36 m OD

Sampling/Testing		Drilling					Strata										Scale		1:50	
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General			Detail			Depth	Legend	Level (m OD)					
20.10 - 20.32	C	19.50 - 21.00	15.00	99 87	60	7								x x x x x x						
		21.00 - 22.50	15.00	53 47	9	AZCL	Between 21.00m - 21.70m, assumed zone of core loss.				x x x x x x									
						NI	Between 21.70m - 21.80m, non-intact, recovered as angular to subangular fine to coarse gravel.				x x x x x x									
						11					x x x x x x									
		22.50 - 24.00	15.00	53 30	0	AZCL	Between 22.50m - 23.20m, assumed zone of core loss.				x x x x x x									
						NI	Between 23.20m - 23.55m, very weak dark grey mudstone, recovered as angular to subangular fine to coarse gravel.				x x x x x x									
						11					x x x x x x									
		24.00 - 25.00	15.00	60 15	15	AZCL	Between 24.00m - 24.40m. assumed zone of core loss.				x x x x x x									
						NI	Between 24.40m - 24.85m. non-intact, recovered as angular to subangular fine to coarse gravel of siltstone and sandstone.				x x x x x x									
						7	Between 24.85m - 25.00m, very strong sandstone with occasional gypsum veins (1mm thick) with discontinuities subhorizontal stepped and rough.				x x x x x x									
																				-21.64

Boring					Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater	
				14.85	14.70	-0.70	27/08/24	08:00							
				22.50	15.00	1.10	27/08/24	17:00							
				22.50	15.00	0.00	28/08/24	08:00							
				25.00	15.00		28/08/24	16:40							

Remarks

Logged by SI

Symbols and abbreviations are explained on the accompanying key sheets.
All dimensions are in metres.

Figure

Sheet 4 of 4
05/02/2025

GEOTECHNICS

Logged in accordance with BS5930:2015 + A1:2020

BOREHOLE RECORD - Cable Percussion

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH102
Client	National Grid	National Grid Coordinates	378526.6 E 186599.0 N	Ground Level	2.95 m OD

Sampling		Properties		Coordinates		Scale		1:50								
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description			Depth	Legend	Level (m OD)						
0.10 - 0.30	B		15/18/17 kPa		TOPSOIL: Grass over very soft dark brown slightly sandy organic clay with occasional rootlets and roots (up to 8mm in diameter).			0.30		2.65						
0.20	HV				Soft grey mottled brown slightly sandy CLAY with occasional rootlets and roots (up to 10mm in diameter).											
0.25	D				Soft grey mottled brown slightly sandy CLAY with occasional rootlets and roots (up to 10mm in diameter).											
0.25	ES		PID: <0.1 ppm		Spongy dark brown mottled black slightly clayey fibrous PEAT.			0.80		2.15						
0.30 - 0.80	B															
0.50	D															
0.50	ES		PID: <0.1 ppm 32/30/34 kPa		Very soft dark brown and grey slightly sandy organic CLAY with occasional pockets (up to 10mm in size) of organic material.			1.60		1.35						
0.50	HV															
0.80 - 1.20	B															
1.00	D		w: 448 %													
1.00	ES															
1.00																
1.20 - 1.65		1.20 (0.70)	S0*/ 450mm													
1.20 - 1.65	D															
1.60 - 2.20	B															
2.00	D	w: 36 % 2 blows	(1.70)	At 3.00m, grading to clayey sand.												
2.20 - 2.65	UT															
2.20 - 3.20	B															
2.65 - 2.80	D	3.20 (2.90)	S9	Firm grey mottled brown slightly gravelly sandy CLAY. Gravel is angular to subangular fine to coarse sandstone.			3.30		-0.35							
3.00	D															
3.20 - 3.65																
3.20 - 3.65	D	w: 17 %	C41	Dense dark brown sandy GRAVEL with a low cobble content of subrounded sandstone. Gravel is subangular to subrounded fine to coarse sandstone and quartzite. Between 4.00-8.30m, driller notes boulders.			4.00		-1.05							
3.30 - 4.00	B															
3.80	D															
4.20 - 4.65		4.20 (4.10)	C50/ 175mm	At 5.20m, very dense.												
4.20 - 5.20	B															
5.00	D															
5.20 - 5.52		5.20 (5.00)	C36													
5.20 - 6.20	B															
6.00	D															
6.20 - 6.65		6.20 (0.00)	C50/ 90mm	At 7.20m, very dense.												
6.20 - 7.20	B															
7.00	D															
7.20 - 7.40		7.20 (0.00)	C18													
7.20 - 8.00	B															
7.50	D															
8.00 - 8.45		8.00 (0.60)	S50/ 0mm	Stiff dark brown and dark grey slightly sandy slightly gravelly CLAY with a low cobble content of subangular sandstone. Gravel is angular to subangular fine to coarse sandstone.			8.30		-5.35							
8.30 - 9.50	B															
9.00	D															
9.50 - 9.50		9.00 (8.60)														
10.00 - 11.20	B															
Boring				Progress					Groundwater							
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater		
1.20	0.20	Inspection Pit	MR/SS	0.00	9.00	8.20	14/08/24	08:00	1.20	6.20	0.70	20		For the -0.41m water strike only : Water level above ground level		
13.18		Cable Percussion	MR/SS	11.65		9.00	-0.20	14/08/24	18:00		6.20	-0.41			20	
						11.65			15/08/24		08:00					
						13.18	9.00	6.10	15/08/24		18:00					

Boring				Progress				Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed
1.20		Inspection Pit	MR/SS	0.00			14/08/24	08:00	1.20		0.70	20	
13.18	0.20	Cable Percussion	MR/SS	11.65	9.00	8.20	14/08/24	18:00	6.20	6.20	-0.41	20	
				11.65	9.00	-0.20	15/08/24	08:00					
				13.18	9.00	6.10	15/08/24	18:00					

Remarks Inspection pit hand excavated to 1.20m depth and no services were found. ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub. Chiselling: 6.60-6.90m for 60 minutes, 9.50-10.00m for 60 minutes & 12.80-13.00m for 30 minutes. Artesian water noted at 6.20mbgl. Driller notes water rising around casing. Borehole terminated at 13.18m, on Clients instruction following 30 minutes chiselling and SPT N value >50. Borehole backfilled with bentonite on completion.

Logged in accordance with BS5930:2015 + A1:2020

Logged by SI

Figure Sheet 1 of 2
05/02/2025

 **GEOTECHNICS**

BOREHOLE RECORD - Cable Percussion

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH102
Client	National Grid	National Grid Coordinates	378526.6 E 186599.0 N	Ground Level	2.95 m OD

Sampling			Properties		Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)	
10.80	D								
11.20 - 11.65		9.00 (8.20)		S30					
11.20 - 11.65	D								
11.80	D					11.70		-8.75	
12.00 - 12.30		9.00 (6.60)		S50/150mm	Extremely weak grey MUDSTONE. Probably interbedded with extremely weak grey SANDSTONE, recovered as clayey gravel.				
12.00 - 12.30	D								
12.00 - 13.00	B								
12.80	D								
13.00 - 13.18		9.00 (6.10)		S50/85mm					
13.00 - 13.18	D				End of Borehole	13.18		-10.23	

Boring				Progress					Groundwater				
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed

BOREHOLE RECORD - Cable Percussion

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH103
Client	National Grid	National Grid Coordinates	378529.0 E 186531.9 N	Ground Level	3.20 m OD

Sampling			Properties		Strata		Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)	
0.10 - 0.30	B				TOPSOIL: Grass over very soft dark brown slightly sandy clay with occasional rootlets and roots (up to 15mm in diameter).				
0.20	HV		10/13/15 kPa			0.30		2.90	
0.25	D				Soft dark brown occasionally mottled grey slightly sandy CLAY.				
0.25	ES		PID: <0.1 ppm						
0.30 - 1.00	B		w: 45 %						
0.50	D								
0.50	ES		PID: <0.1 ppm			1.30		1.90	
0.50	HV		25/28/24 kPa		Very soft greyish brown and brown slightly sandy organic CLAY with occasional pockets (up to 10mm in size) of organic material.				
1.00	D								
1.00	ES		PID: <0.1 ppm						
1.20 - 1.65		1.20 (0.40)		S0*/450mm					
1.20 - 1.65	D								
1.30 - 2.20	B								
1.80	D		w: 54 %						
2.20 - 2.65	UT	1.90 (1.60)	6 blows						
2.20 - 3.20	B								
2.80	D		w: 49 %			3.20		0.00	
3.20 - 3.65		3.20 (2.10)		S2	Very soft dark brown slightly sandy organic CLAY with many pockets (upto 80mm in size) of fibrous peat.				
3.20 - 3.65	D								
3.20 - 3.80	B		w: 146 %			3.80		-0.60	
3.80 - 4.40	B				Stiff greyish brown slightly gravelly sandy CLAY. Gravel is angular to subangular fine to coarse sandstone.				
4.00	D		w: 24 %						
4.40 - 4.85		4.40 (0.00)		S33		4.40		-1.20	
4.40 - 4.85	D				Dense dark brown slightly sandy GRAVEL. Gravel is subangular to subrounded fine to coarse sandstone and quartzite.				
4.40 - 5.30	B								
5.00	D								
5.30 - 5.75		5.30 (0.00)		C30					
5.30 - 6.30	B								
6.00	D								
6.30 - 6.72		6.30 (0.00)		C50/275mm	At 6.30m, very dense.				
6.30 - 7.20	B								
7.00	D								
7.20 - 7.65		7.20 (-0.10)		C35					
7.20 - 7.70	B								
7.50	D								
7.70 - 8.10	B								
8.00	D		w: 15 %			7.70		-4.50	
8.10 - 8.55		8.00 (2.20)		S39	Very stiff dark brown slightly sandy gravelly CLAY with a low cobble content of subrounded sandstone. Gravel is angular to subrounded fine to coarse sandstone.				
8.10 - 8.55	D								
8.50 - 9.50	B								
9.00	D								
9.50 - 9.95	UT	9.50 (5.40)	56 blows						
9.50 - 9.95			cu: 144 kPa						
10.00 - 11.20	B								

Boring				Progress				Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed
1.20		Inspection Pit	MR/TS	0.00			20/08/24	08:00	0.75		0.40	20	
14.27	0.20	Cable Percussion	MR/TS	14.27	9.50	5.50	20/08/24	18:00	4.40	4.40	-0.41	20	

Remarks	Inspection pit hand excavated to 1.20m depth and no services were found. ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub. Borehole backfilled with bentonite completion.	Logged by	SI
Symbols and abbreviations are explained on the accompanying key sheets. All dimensions are in metres. Logged in accordance with BS5930:2015 + A1:2020		Figure	Sheet 1 of 2 05/02/2025

BOREHOLE RECORD - Cable Percussion

Project

National Grid - 101677 Margam TATA

Client

National Grid

Engineer

Baker Hicks

National Grid Coordinates

378529.0 E
186531.9 N

Project No.

PC248745 - Phase 1

Borehole

BH103

Ground Level

3.20 m OD

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
10.80	D							
11.20 - 11.54		9.50 (5.50)		S50/190mm				
11.20 - 11.54	D							
11.20 - 12.50	B							
12.00	D		w: 15 %					
12.70	D					12.60		-9.40
12.80 - 13.12		9.50 (5.40)		S50/190mm	Extremely weak dark grey MUDSTONE with occasional coal fragments (up to 6mm in size), recovered as clayey gravel.			
12.80 - 13.12	D							
13.00 - 14.00	B							
13.50	D							
14.00 - 14.27		9.50 (5.50)		S50/150mm				
14.00 - 14.27	D				End of Borehole	14.27		-11.07

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks

AGS

Symbols and abbreviations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged by

SI

Figure

Sheet 2 of 2
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GEOTECHNICS

Logged in accordance with BS5930:2015 + A1:2020

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH104
Client	National Grid	National Grid Coordinates	378634.4 E 186469.8 N		

Sampling			Properties		Strata	Scale 1:50			
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)	
0.10 - 0.30	B		15/17/16 kPa	S1	TOPSOIL: Grass over very soft slightly sandy organic clay with many rootlets and occasional roots (up to 15mm diameter).	0.30			
0.20	HV								
0.25	D								
0.25	ES								
0.25			PID: 0.1 ppm			Very soft grey and dark brown slightly sandy CLAY with occasional pockets (up to 10mm in size) of organic material and occasional roots (up to 20mm diameter).			
0.30 - 1.00	B					Below 1.00m, roots absent.			
0.50	D								
0.50	ES								
0.50			PID: <0.1 ppm						
0.50	HV				20/19/20 kPa				
1.00	D								
1.00	ES								
1.00		PID: 5 ppm							
1.20 - 1.65	UTF	1.20 (0.00)	1 blows		Spongy brown fibrous PEAT with many pockets (up to 80mm in size) of brownish grey organic clay and occasional wood fragments (up to 40mm in size).	2.00			
1.20 - 2.00	D		w: 53 %						
2.00 - 2.45		2.00 (0.00)							
2.00 - 2.45	D								
2.00 - 3.20	B								
2.80	D		w: 162 %						
3.20 - 3.65	UT	3.00 (0.80)	8 blows						
3.40 - 4.50	B				Stiff dark brown and dark grey slightly gravelly sandy CLAY with a low cobble content of subangular sandstone. Gravel is subangular to subrounded fine to coarse sandstone.	3.40			
4.00	D		w: 17 %						
4.50 - 4.95		4.50 (2.10)		S19					
4.50 - 4.95	D								
5.10 - 6.00	B				Medium dense dark brown sandy GRAVEL with a low cobble content of subrounded sandstone. Gravel is subangular to subrounded fine to coarse sandstone and quartzite.	5.10			
5.50	D								
6.00 - 6.45		6.00 (4.10)		C20					
6.20 - 7.00	B		w: 15 %		Stiff dark grey slightly gravelly sandy CLAY. Gravel is angular to subangular fine to coarse sandstone and quartzite.	6.20			
6.50	D								
7.00 - 7.45		7.00 (DRY)		S23					
7.00 - 7.45	D								
7.00 - 8.20	B								
7.80	D								
7.80	W								
8.20 - 8.65		7.50 (DRY)		S33					
8.20 - 8.65	D								
8.20 - 9.00	B								
9.30	D								
9.50 - 9.95	UT	7.50 (DRY)	36 blows						
9.50 - 9.95			cu: 304 kPa						
9.95 - 10.10	D								
10.00 - 11.00	B								

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20		Inspection Pit	MR/SS	0.00			15/08/24	08:00	0.20		0.00	20		
11.80	0.20	Cable Percussion	MR/SS	6.45	6.00	4.10	15/08/24	18:00	11.80	7.50	7.80	20		
13.90	0.15	Cable Percussion	MR/SS	6.45	6.00	DRY	16/08/24	08:00						
25.50	0.12	Rotary Core	CJ/IJ	11.80	7.50	7.80	16/08/24	18:00						

Remarks	AGS Inspection pit hand excavated to 1.20m depth and no services were found. ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub. Flush : Air/Mist	Logged by	SI
Symbols and abbreviations are explained on the accompanying key sheets. All dimensions are in metres.	Logged in accordance with BS5930:2015 + A1:2020	Figure	Sheet 1 of 4 05/02/2025

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH104
Client	National Grid	National Grid Coordinates	378634.4 E 186469.8 N		

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
10.80	D	7.50 (10.60)	w: 13 %	S35				
11.00 - 11.45								
11.00 - 11.45	D							
11.80 - 12.20	B	12.20 (1.20)		C37	Dense grey slightly sandy GRAVEL. Gravel is angular to subangular fine to coarse sandstone.	11.80		
12.20 - 12.65								
12.20	D				Extremely weak dark grey MUDSTONE, recovered as angular to subangular fine to coarse gravel.	12.40		
12.40 - 13.20	B							
12.80	D	13.20 (1.00)		S50/ 150mm				
13.20 - 13.48								
13.20 - 13.48	D							
13.20 - 13.90	B							
13.50	D	13.90 (0.00)		S50/ 50mm	Borehole continued using alternative techniques - see next page			
13.90 - 14.00								
13.90 - 14.00	D							

Boring				Progress					Groundwater				
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed
				11.80	7.50	-0.10	19/08/24	08:00					
				13.90	13.90	0.00	19/08/24	18:00					
				13.90	14.50	-0.30	29/08/24	08:00					
				25.50	14.50	0.00	29/08/24	17:00					

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH104
Client	National Grid	National Grid	378634.4 E		
		Coordinates	186469.8 N		

Sampling/Testing		Drilling					Strata		Scale 1:50		
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
15.47 - 15.55	C						Borehole continued using rotary drilling techniques - see below				
18.00 - 18.33	C	13.90 - 15.00	13.90	100 64	0	NI	Weak to medium strong dark grey SILTSTONE. Discontinuities are subhorizontal (0-15 degrees), very closely and closely spaced, stepped, rough and clean.	Between 13.90m-14.30m, non-intact, recovered as angular to subangular fine to coarse gravel.			
						16					
		15.00 - 16.50	13.90	93 33	0	AZCL					
						17					
						NI					
						1					
		16.50 - 18.00	13.90	90 60	8	AZCL					
						NI					
						11					
						4					
20.00 - 20.10	C	18.00 - 19.50	13.90	100 95	54		Strong grey SILTSTONE with occasional very strong ironstone nodules up to 20mm in size. Discontinuities are (Set i) subhorizontal (0-15 degrees) closely and medium spaced, stepped, rough with occasional pyrite mineralisation (1mm thick). (Set ii) (75-90 degrees) open/closed, subhorizontal undulating stepped, rough with occasional pyrite crystals.	Between 16.50m-16.65m. assumed zone of core loss. Between 17.10m-17.50m. subhorizontal discontinuities (75-90 degrees) undulating, partially open, stepped, rough with occasional pyrite mineralisation (1mm thick). Between 18.00m-18.50m. subhorizontal discontinuity, partially open and clean, stepped, rough with pyrite mineralisation up to (10mm thick). Between 18.60m-18.75m. discontinuity inclined at (70 degrees) stepped and rough. Between 19.40m and 19.50m. discontinuity inclined between (60-70 degrees), stepped rough and clean. Between 19.50m and 19.75m. discontinuity subhorizontal, undulating and closed.			
		19.50 - 21.00	13.90	100 100	94						

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20		Inspection Pit	MR/SS	0.00			15/08/24	08:00	0.20		0.00	20		
11.80	0.20	Cable Percussion	MR/SS	6.45	6.00	4.10	15/08/24	18:00	11.80	7.50	7.80	20		
13.90	0.15	Cable Percussion	MR/SS	6.45	6.00	DRY	16/08/24	08:00						
25.50	0.12	Rotary Core	CJ/IJ	11.80	7.50	7.80	16/08/24	18:00						

Remarks	AGS Inspection pit hand excavated to 1.20m depth and no services were found. ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub. Flush : Air/Mist	Logged by	SI
Symbols and abbreviations are explained on the accompanying key sheets. All dimensions are in metres.	Logged in accordance with BS5930:2015 + A1:2020	Figure	Sheet 3 of 4 05/02/2025
			

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA
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Steel Connection

Client National Grid

Engineer Baker Hicks

National Grid	378634.4	E
Coordinates	186469.8	N

Project No. PC248745 - Phase 1

Borehole BH104

Sampling/Testing		Drilling					Strata		Scale		1:50				
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)				
21.45 - 21.89	C	19.50 - 21.00	13.90	100 100	94	1	Very strong grey dark grey SILSTONE. Discontinuities are (Set i) subhorizontal (0-15 degrees) medium and closely spaced, stepped, rough and clean. (Set ii) subvertical (75-90 degrees), partly open, undulating, stepped, rough with pyrite crystals.	Between 21.38m and 21.46m. non-intact, recovered as angular to subangular fine to coarse gravel.	20.10						
		21.00 - 22.50	13.90	100 97	94										
		NI													
		22.50 - 24.00	13.90	100 97	74										
23.55 - 23.75	C	24.00 - 25.50	13.90	100 87	57	4	Strong grey SILSTONE. Discontinuities are (Set i) subhorizontal (0-15 degrees) closely and medium spaced, stepped, rough and clean. (Set ii) discontinuities inclined between (60-70 degrees) undulating and stepped, rough and clean.	At 22.95m. Ironstone nodule. Between 23.10m and 23.40m. discontinuity subhorozontal (80-90 degrees), stepped, rough and clean. Between 23.80m and 24.00m. fracture inclined at (70 degrees), closed. Between 24.10m and 24.40m. discontinuity inclined between (60 and 70 degrees) stepped, rough and clean. Between 24.80m and 25.00m, weak and dark grey, non-intact, recovered as angular to subangular fine to coarse gravel. Below 25.00m. becoming very strong.	23.00						
												NI			
24.95 - 25.35	C					4		End of Borehole	25.50						
Boring						Progress				Groundwater					
Depth	Hole Dia.	Technique		Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
					11.80	7.50	-0.10	19/08/24	08:00						
					13.90	13.90	0.00	19/08/24	18:00						
					13.90	14.50	-0.30	29/08/24	08:00						
					25.50	14.50	0.00	29/08/24	17:00						

Remarks



Symbols and abbreviations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

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Figure Sheet 4 of 4
05/02/2025



BOREHOLE RECORD - Cable Percussion

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH105
Client	National Grid	National Grid Coordinates	378542.2 E 186424.2 N	Ground Level	3.04 m OD

Sampling			Properties		Strata	Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
0.10 - 0.30	B				TOPSOIL: Grass over very soft dark brown slightly sandy organic clay with occasional rootlets up to 20mm in diameter.	0.30		2.74
0.25	D							
0.25	ES				Soft blueish grey slightly sandy CLAY with occasional roots up to 10mm in diameter.			
0.25			PID: <0.1 ppm					
0.50	HV		15/18/17 kPa					
0.50	D		w: 34 %					
0.50	ES							
0.50 - 1.00	B					1.20		1.84
0.50			PID: <0.1 ppm		Very soft bluish grey slightly sandy organic CLAY with large pockets (up to 100mm in size) of peat.			
0.50	HV		40/38/39 kPa					
1.00	D							
1.00	ES							
1.00			PID: 0.10 ppm					
1.20 - 1.65		1.20 (0.20)		S1				
1.20 - 1.65	D		w: 38 %					
1.20 - 2.20	B							
2.00	D							
2.20 - 2.65	UT	2.20 (DRY)	2 blows					
2.20 - 3.20	B							
2.65 - 2.80	D							
2.80	D							
3.00	D				Below 3.50m, driller noted presence of peat bands.			
3.20 - 3.65		3.20 (3.20)		S0*/450mm				
3.20 - 3.65	D							
3.20 - 4.40	B							
4.00	D							
4.40 - 4.85	UT	4.40 (DRY)	4 blows					
4.80 - 5.20	B					4.80		-1.76
5.00	D				Medium dense dark brown slightly sandy GRAVEL with a low cobble content of subrounded sandstone and quartzite. Gravel is subangular to subrounded fine to coarse of sandstone and quartzite.			
5.20 - 5.65		5.20 (0.80)		S25				
5.20 - 6.50	B							
6.00	D							
6.50 - 6.57		6.50 (1.00)		C50/10mm	At 6.50m, very dense.			
6.50 - 7.30	B							
7.00	D							
7.40	D		w: 11 %			7.30		-4.26
7.50 - 7.95		7.50 (7.50)		S26	Stiff dark brown slightly sandy slightly gravelly CLAY with a low cobble content of subrounded quartzite and sandstone. Gravel is subangular to subrounded fine to coarse of sandstone and quartzite.			
7.50 - 7.95	D							
7.50 - 8.50	B							
8.00	D							
8.50 - 8.95	UT	8.50 (7.60)	47 blows					
8.50 - 9.50	B							
8.95 - 9.10	D							
8.95 - 9.10	UT		20 blows					
9.40	D							
9.50 - 9.95		9.00 (7.60)		S35	Below 9.50m, becoming very stiff.			
9.50 - 9.95	D							
10.00 - 11.00	B							

Boring				Progress				Groundwater				
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins
1.20	0.30	Inspection Pit	MR/TS	0.00			27/08/24	13:00	0.20	1.20	0.20	20
3.20	0.20	Cable Percussion	MR/TS	3.20	3.20	3.20	27/08/24	18:00	5.00	5.00	0.80	20
				3.20		DRY	28/08/24	08:00				
				15.00	9.00	11.60	28/08/24	14:41				

Remarks	AGS	Inspection pit hand excavated to 1.20m depth and no services were found. ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub. Chiselling 6.50 - 6.70m 30mins and 14.50 - 14.70m 30 mins. At 11.00m, UT catcher and shoe broken during sampling.	Logged by	SI
Symbols and abbreviations are explained on the accompanying key sheets. All dimensions are in metres.		Logged in accordance with BS5930:2015 + A1:2020	Figure	Sheet 1 of 2 05/02/2025

BOREHOLE RECORD - Cable Percussion

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH105
Client	National Grid	National Grid Coordinates	378542.2 E 186424.2 N	Ground Level	3.04 m OD

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
10.50	D							
11.00	UT	9.00 (10.20)	61 blows					
11.00 - 12.10	B		w: 12 %					
11.45 - 11.60	D							
11.80	D							
12.10 - 12.41		9.00 (10.10)		S50/156mm				
12.10 - 12.41	D							
12.70 - 13.40	B				Extremely weak greyish brown MUDSTONE, recovered as gravelly clay.	12.70		-9.66
13.00	D							
13.50	D				Extremely weak grey MUDSTONE, recovered as angular to subangular fine to coarse gravel.	13.40		-10.36
13.60 - 13.98		9.00 (12.10)		S50/225mm				
13.60 - 13.98	D							
13.60 - 14.70	B							
14.50	D							
14.70 - 14.99		9.00 (11.60)		S50/145mm				
14.70 - 14.98	D				End of Borehole	15.00		-11.96

Boring				Progress					Groundwater				
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed

BOREHOLE RECORD - Cable Percussion

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH106
Client	National Grid	National Grid Coordinates	378571.7 E 186406.9 N	Ground Level	3.15 m OD

Sampling			Properties		Strata	Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
0.10 - 0.40	B				TOPSOIL: Very soft dark brown slightly sandy organic clay with occasional rootlets and roots up to 20mm in diameter.			
0.25	D					0.40		2.75
0.25	ES		PID: <0.1 ppm 12/11/15 kPa		Very soft bluish grey slightly sandy CLAY.			
0.25								
0.50	HV							
0.50	D							
0.50	ES							
0.50 - 1.00	B		w: 53 % PID: <0.1 ppm 18/20/19 kPa					
0.50	HV							
1.00	D							
1.00	ES		PID: <0.1 ppm		Below 1.60m: with occasional large pockets (up to 80mm in size) of peat.			
1.20 - 1.65		1.20 (0.00)		S0*/ 450mm				
1.20 - 1.65	D							
1.60 - 2.50	B							
2.00	D							
2.50 - 2.95		2.50 (DRY)		S0*/ 450mm				
2.50 - 2.95	D							
2.50 - 3.50	B							
3.00	D							
3.50 - 3.95		3.50 (DRY)		S0*/ 450mm		3.60		-0.45
3.50 - 3.95	D				Spongy dark brown fibrous PEAT.			
3.50 - 4.50	B							
4.00	D							
4.50 - 4.95		4.50 (2.70)		S26		4.70		-1.55
4.50 - 4.95	D				Medium dense dark brown slightly sandy GRAVEL with a low subangular cobble content of sandstone and quartzite. Gravel is subangular to subrounded fine to coarse of sandstone and quartzite.			
4.70 - 5.50	B							
5.00	D							
5.50 - 5.95		5.50 (1.10)		C33	At 5.50m, dense.			
5.50 - 6.50	B							
6.00	D							
6.50 - 6.90		6.50 (0.00)		C50/ 250mm	Below 6.50m: with a medium subrounded cobble content of sandstone and quartzite. At 6.50m, very dense.			
6.50 - 7.50	B							
7.00	D							
7.50 - 7.95		7.50 (0.00)		C19				
7.80 - 8.50	B					7.80		-4.65
8.00	D		w: 12 %		Very stiff brownish grey slightly sandy gravelly CLAY. Gravel is angular to subanhgular fine to coarse of sandstone.			
8.50	UT	8.50 (7.10)	26 blows cu: 140 kPa		At 8.50m: becoming sandy clay.			
8.95 - 9.10	D							
9.00 - 10.00	B							
9.50	D							
10.00 - 10.45		9.00 (9.00)		S47				

Boring				Progress				Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed
1.20	0.30	Inspection Pit	MR/SS	0.00			12/09/24	08:00	0.00	0.00	0.00	20	
14.14	0.20	Cable Percussion	MR/SS	14.14	9.00	12.10	12/09/24	17:00	4.70	4.70	2.10	20	

Remarks

 Inspection pit hand excavated to 1.20m depth and no services were found.

ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub.

Chiseling 7.10-7.30m 30mins.

Artesian water noted at a depth of 6.00m.

Symbols and abbreviations are explained on the accompanying key sheets.

All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

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Figure

Sheet 1 of 2

05/02/2025



BOREHOLE RECORD - Cable Percussion

Project		National Grid - 101677 Margam TATA		Engineer		Baker Hicks		Project No.		PC248745 - Phase 1	
		Steel Connection						Borehole		BH106	
Client		National Grid		National Grid		Coordinates		378571.7 E		Ground Level	
						186406.9 N		3.15 m OD			

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
10.00 - 10.45	D							
10.50 - 11.50	B							
11.00	D		w: 13 %			11.00		-7.85
11.50 - 11.95		9.00 (10.30)		S31	Very stiff grey slightly gravelly sandy CLAY. Gravel is angular to subangular fine to coarse of sandstone.			
11.50 - 11.95	D							
12.20 - 13.00	B				Extremely weak grey MUDSTONE, recovered as angular to subangular fine to coarse gravel.	12.20		-9.05
12.50	D							
13.10 - 13.50		9.00 (11.60)		S50/ 245mm				
13.10 - 13.50	D							
13.40	D							
13.80 - 14.14		9.00 (12.10)		S50/ 195mm				
13.80 - 14.14	D				End of Borehole	14.14		-10.99

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

Remarks



Symbols and abbreviations are explained on the accompanying key sheets. All dimensions are in metres.

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SI

Figure

Sheet 2 of 2
05/02/2025



Logged in accordance with BS5930:2015 + A1:2020

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH107
Client	National Grid	National Grid Coordinates	378601.9 E 186379.5 N	Ground Level	2.95 m OD

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
0.10 - 0.20	B				TOPSOIL: Grass over very soft dark brown slightly sandy organic clay with occasional rootlets and roots up to 20mm in diameter.	0.20		2.75
0.10	HV		5/8/6 kPa		Spongy dark brown to black fibrous PEAT.			
0.50	D							
0.50	ES		PID: 0.10 ppm					
0.50								
1.20 - 1.65		1.20 (0.20)		S0*/450mm				
1.20 - 2.50	D		w: 271 %					
2.50 - 2.95		2.50 (0.30)		S0*/450mm				
2.50 - 3.50	D							
3.50 - 3.95		3.50 (0.60)		S0*/450mm				
3.50 - 4.50	B							
4.00	D		w: 53 %		Below 4.00m, becoming slightly clayey fibrous peat.			
4.50	UTF	4.50 (1.00)	10 blows		Soft dark brown slightly gravelly sandy CLAY. Gravel is subangular and subrounded fine to coarse of sandstone and quartzite.	4.50		-1.55
4.50 - 5.40	B		w: 22 %					
5.20	D							
5.40 - 5.85		5.40 (1.80)		S23	Medium dense greyish brown sandy GRAVEL with a low subangular cobble content of sandstone and quartzite. Gravel is subangular and subrounded fine to coarse of sandstone and quartzite.	5.40		-2.45
5.40 - 5.85	D							
5.50 - 6.50	B							
6.00	D							
6.50 - 6.95		6.50 (0.00)		S33	At 6.50m, dense.			
6.50 - 7.50	B							
7.00	D							
7.50 - 7.95		7.50 (1.80)		S18				
7.70 - 8.70	B				Stiff to very stiff dark brown slightly sandy gravelly CLAY. Gravel is angular and subangular fine to coarse of sandstone and quartzite.	7.70		-4.75
8.20	D		w: 14 %					
8.70 - 9.15	UT	8.70 (DRY)	57 blows					
8.70 - 9.15			cu: 64 kPa					
9.15 - 9.30	D							
9.30 - 10.00	B							
9.50	D							
10.00 - 10.45		9.00 (DRY)		S31				
10.00 - 10.45	D							

Remarks		Inspection pit hand excavated to 1.20m depth and no services were found.	Logged by	SI
		ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub. Not possible to take ES samples at 0.25 and 1.00m due to excessive water and little recovery.	Figure	Sheet 1 of 7
		Artesian water noted at 5.40m, water level to 0.46m above ground level.		05/02/2025
		Flush:Air/Mist.		
Symbols and abbreviations are explained on the accompanying key sheets.				
All dimensions are in metres.				
		Logged in accordance with BS5930:2015 + A1:2020		
				GEOTECHNICS

Remarks Inspection pit hand excavated to 1.20m depth and no services were found. ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub. Not possible to take ES samples at 0.25 and 1.00m due to excessive water and little recovery. Artesian water noted at 5.40m, water level to 0.46m above ground level. Flush: Air/Mist.

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Figure Sheet 1 of 7

05/02/2025

Logged in accordance with BS5930:2015 + A1:2020

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH107
Client	National Grid	National Grid Coordinates	378601.9 E 186379.5 N	Ground Level	2.95 m OD

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
10.50 - 11.50	B				Below 10.00m, becoming very stiff.			
11.00	D		w: 17 %					
11.50 - 11.95	D	9.00 (DRY)		S38				
11.50 - 11.95	D							
12.00 - 13.00	B							
12.50	D							
13.20 - 13.52		9.00 (8.80)		S50/ 165mm	Extremely weak dark grey MUDSTONE, recovered as angular and tabular fine to coarse gravel.	13.10		-10.15
13.20 - 13.52	D							
13.50 - 14.50	B							
14.00	D							
14.50 - 14.70		9.00 (8.80)		S50/ 115mm	Between 14.50m - 16.80m, no recovery.	14.70		-11.75
14.50	D				Borehole continued using alternative techniques - see next page			

Boring				Progress				Groundwater						
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
				25.50	14.50	-0.30	12/09/24	08:00						
				39.00	14.50	12.00	12/09/24	17:00						
				39.00	14.50	-0.65	13/09/24	08:00						
				49.50	14.50		13/09/24	17:00						

Remarks



Symbols and abbreviations are explained on the accompanying key sheets.
All dimensions are in metres.

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SI

Figure

Sheet 2 of 7
05/02/2025



Logged in accordance with BS5930:2015 + A1:2020

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA
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Steel Connection

Client National Grid

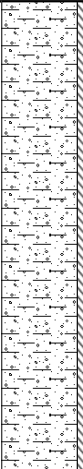
Engineer Baker Hicks

National Grid	378601.9	E
Coordinates	186379.5	N

Project No. PC248745 - Phase 1

Borehole BH107

Ground Level 2.95 m OD

Sampling/Testing		Drilling					Coordinates					Strata					Scale		1:50	
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General				Detail			Depth	Legend		Level (m OD)			
18.95 - 19.05	C						Borehole continued using rotary drilling techniques - see below													
		14.50 - 16.00	14.50	0 NA	NA	NR	Soft MUDSTONE to gravelly clay. (drillers description)													
		16.00 - 16.50	14.50	0 NA	NA		Soft MUDSTONE. (drillers description)							16.00			-13.05			
		16.50 - 18.00	14.50	14 7	0	NI	Extremely weak black carbonaceous MUDSTONE. Generally non-intact, recovered as angular to subangular fine to coarse gravel.							16.50			-13.55			
		18.00 - 19.50	14.50	54 47	7		AZCL	Between 18.00m - 18.70m. assumed zone of core loss.												
						11	Weak dark grey slightly sandy MUDSTONE with occasional black plant remains up to 5mm diameter on discontinuity surface. Discontinuities are generally subhorizontal (0-15 degrees) very closely and closely spaced, stepped, rough.							18.80			-15.85			
		19.50 - 21.00	14.50	73 60	23	AZCL	Between 19.50m - 19.90m. assumed zone of core loss.													
Boring						Progress					Groundwater									
Depth	Hole Dia.	Technique		Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater					
1.20	0.30	Inspection Pit		MR/TS	0.00			09/09/24	08:00	5.40	5.40	-0.46	20							
14.70	0.20	Cable Percussion		MR/TS	14.50	9.00	8.80	09/09/24	17:00	21.00	14.50	14.30	20							
49.50	0.12	Rotary Core		CJ/IJ	14.50	14.50	1.20	11/09/24	08:00											
					25.50	14.50	2.90	11/09/24	17:00											

Remarks		Inspection pit hand excavated to 1.20m depth and no services were found.
		ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub. Not possible to take ES samples at 0.25 and 1.00m due to excessive water and little recovery. Artesian water noted at 5.40m, water level to 0.46m above ground level. Flush: Air / Mist.

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Figure Sheet 3 of 7
05/02/2025

Symbols and abbreviations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020



BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH107
Client	National Grid	National Grid Coordinates	378601.9 E 186379.5 N	Ground Level	2.95 m OD

Sampling/Testing		Drilling					Strata		Scale 1:50		
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
21.35 - 21.52	C	19.50 - 21.00	14.50	73 60	23	12	Very strong grey SILTSTONE with rare gypsum veins up to 1mm thick. Discontinuities are (Set i) subhorizontal (0-15 degrees) very closely and medium spaced, stepped, rough and clean. (Set ii) subvertical (80-90degrees) varying to between (60-70 degrees), stepped, rough with rare gypsum veins (up to 1mm thick) on discontinuity surfaces.	Between 20.00m - 20.40m. with occasional coal fragments up to 5mm diameter.	20.60		-17.65
		21.00 - 22.50	14.50	99 73	43	8		Between 20.60 - 20.80m, 20.80 - 21.20m, 21.40 - 21.52m, 21.52 - 21.73 and 21.90 - 22.50m discontinuities vertical inclined between (70-90 degrees) stepped, rough with rare gypsum veins (up to 1mm thick)			
23.15 - 23.28	C	22.50 - 24.00	14.50	100 80	7	NI	Medium strong dark grey SILTSTONE. discontinuities are predominantly subhorizontal (15 degrees) planar, smooth and clean.	Between 22.50 - 22.60m. non-intact recovered as angular to subangular fine to coarse gravel fragments.	22.50		-19.55
		24.00 - 25.50	14.50	87 47	0	20 AZCL NI		Between 23.65 - 23.90m. non-intact recovered as angular and subangular fine to coarse gravel.	23.90		
27.40 - 27.50	C	25.50 - 27.00	14.50	80 47	0	7 NI	Weak to medium strong dark grey slightly sandy MUDSTONE with rare very strong siltstone bands up to 50mm thick. Discontinuities are subhorizontal (0-15 degrees) very closely and closely spaced planar, rough and clean.	Between 24.10m - 24.25m, non-intact, recovered as angular to subangular fine to coarse gravel.	27.00		-24.05
		27.00 - 28.50	14.50	87 54	11	19 AZCL		Between 24.68m - 24.80m, non-intact recovered as angular to subangular fine to coarse gravel. Between 25.00m - 25.80m. assumed zone of core loss.			
28.15 - 28.33	C	28.50 - 30.00	14.50	63 47	0	+25	Very strong grey SILTSTONE with many discontinuities subhorizontal black carbonaceous lenses (up to 1mm thick). Discontinuities are (Set i) subhorizontal (0-15 degrees) very closely and closely spaced, stepped, rough and clean. (Set ii) subhorizontal (75-90 degrees) inclined, stepped, rough with occasional pyrite crystals and gypsum veins (up to 1mm thick).	At 26.10m. layer of very strong siltstone. Between 26.10m - 26.15m, 26.55m - 26.60m, 26.70m - 26.78m and 26.87m - 26.95m, non-intact recovered as angular to subangular fine to coarse gravel, possibly extremely closely fractured.			
						12		Between 27.00m - 27.20m. assumed zone of core loss. Between 27.80m - 27.88m, non-intact, recovered as angular to subangular fine to coarse gravel. Between 28.30m - 28.50m. non-intact, recovered as angular to subangular fine to coarse gravel. Between 28.50m - 29.05m. assumed zone of core loss. Between 29.20m - 29.30m, 29.38m - 29.48m, 29.50m - 29.58m and 29.60m - 29.80m, discontinuities inclined between (70-80 degrees), stepped rough, with occasional sand infill (up to 2mm thick).			

Remarks												Logged by		SI
Symbols and abbreviations are explained on the accompanying key sheets. All dimensions are in metres.												Figure		Sheet 4 of 7 05/02/2025
Logged in accordance with BS5930:2015 + A1:2020														GEOTECHNICS

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH107
Client	National Grid	National Grid Coordinates	378601.9 E 186379.5 N	Ground Level	2.95 m OD

Sampling/Testing		Drilling					Strata		Scale 1:50				
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)		
36.25 - 36.30 37.10 - 37.24 38.00 - 38.25	C	30.00 - 31.00	14.50	90 48	36	AZCL	Strong to very strong dark grey thinly laminated SILTSTONE with rare gypsum veins up to 1mm thick. Discontinuities are (Set i) subhorizontal (0-15 degrees) very closely and closely spaced planar, rough and clean. (Set ii) Vertical (80-90 degrees), stepped, rough with occasional gypsum veins (up to 1mm thick) on surface. Very strong grey SILTSTONE. Discontinuities subhorizontal (0-15 degrees) closely and medium spaced, stepped, rough and clean. Black carbonaceous lenses (up to 1mm thick).	Between 30.00m - 30.10m. assumed zone of core loss. Between 30.10m - 30.33m. non-intact recovered as angular to subangular fine to coarse gravel. At 30.30m. Discontinuities inclined (60-70 degrees), stepped, rough and clean. Between 31.00m - 31.20m, assumed zone of core loss. Between 31.20m - 31.46m, non-intact, recovered as angular to subangular fine to coarse gravel. Between 31.46m - 31.63m and 31.90m - 32.00m, discontinuities vertical (90 degrees), stepped, rough and clean. Between 32.00m - 32.50m, non-intact, recovered as angular and subangular fine to coarse gravel and cobbles. Between 32.50m - 33.10m, vertical discontinuity (90 degrees), stepped, rough and clean. Between 33.50m - 33.60m. non-intact, recovered as angular to subangular fine to coarse gravel.	34.00		-31.05		
						NI							
		31.00 - 32.30	14.50	85 54	10	4		Between 34.00m - 34.10m and 34.26m - 34.34m, non-intact, recovered as angular and tabular fine to coarse gravel. At 34.60m., discontinuity inclined between (80-90 degrees), undulating, stepped, rough and clean.					
						NI							
						AZCL							
						NI							
						13							
		32.30 - 33.60	14.50	100 88	54	NI		Between 35.00m - 35.30m, non-inact, recovered as angular to subangular fine to coarse gravel. 35.70m - 35.90m. discontinuity inclined at (70 degrees) stepped, rough and clean.					
						AZCL							
						9							
		33.60 - 35.00	14.50	71 43	11	NI		Between 36.50m - 36.70m. vertical discontinuity inclined (85 degrees) stepped, rough and clean.					
						AZCL							
						13							
		35.00 - 36.00	14.50	100 90	45	+25		Between 37.50m - 37.60m. assumed zone of core loss.					
						20							
	8												
	36.00 - 37.50	14.50	100 83	37	8	Between 39.30m - 39.56m. discontinuities subhorizontal extremely closely spaced.							
								37.50 - 39.00	14.50	93 80	49	AZCL	
												NI	
	20												
	39.00 - 40.50	14.50	100 90	51	10								
					+25								

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
				49.50	14.50		16/09/24	08:00						
				49.50	14.50		16/09/24	17:00						

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH107
Client	National Grid	National Grid Coordinates	378601.9 E 186379.5 N	Ground Level	2.95 m OD

Sampling/Testing		Drilling					Strata		Scale 1:50		
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
		39.00 - 40.50	14.50	100 90	51	5					
		40.50 - 42.00	14.50	100 98	73	NI		Between 40.78m - 40.82m. non-intact, recovered as angular and subangular fine to coarse gravel. Between 40.90m - 41.00m. discontinuity inclined (60 degrees), closely spaced, planar, rough and clean.			
		42.00 - 43.50	14.50	100 93	47	6		Between 42.56m - 42.67m, 42.80m - 42.92m and 42.95m - 43.10m. discontinuities inclined (50-70 degrees), stepped, rough and clean.			
		43.50 - 45.00	14.50	100 87	27	NI		Between 43.50m - 43.62m. non-intact, recovered as angular to subangular fine to coarse gravel. Between 43.75m - 43.95m. discontinuities inclined at (70 degrees), stepped, rough and clean.			
		45.00 - 46.50	14.50	87 67	33	AZCL		Between 44.10m - 44.25m, 44.72m - 44.98m. discontinuities inclined (40-60 degrees), stepped, rough and clean. Between 45.00m - 45.20m. assumed zone of core loss. Between 45.30m - 45.38m, 45.40m - 45.48m, 45.51m - 45.59m, 45.90m - 45.98m and 46.32m - 46.42m. discontinuities inclined (40-70 degrees) stepped, rough and clean.	45.90		-42.95
		46.50 - 48.00	14.50	100 67	33	8	Weak to medium strong dark grey SILTSTONE. Discontinuities are (Set i) subhorizontal very closely and closely spaced, stepped, rough and clean. (Set ii) inclined (40-70 degrees), stepped, rough and clean.	Between 46.00m - 46.20m. non-intact, recovered as angular to subangular fine to coarse gravel. Between 46.60m - 46.70m, 46.90m - 47.10m and 47.50m - 47.55m, discontinuities inclined at (40-70 degrees) stepped, rough and clean.			
		48.00 - 49.50	14.50	93 73	24	NI		Between 48.00m - 48.10m, assumed zone of core loss. Between 48.40m - 48.46m, 48.70m - 48.90m and 48.90m - 49.10m, discontinuities inclined at (40-70 degrees) stepped, rough and clean.			
						9		End of Borehole	50.00		-47.05

Boring				Progress				Groundwater				
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA
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Steel Connection

Client National Grid

Engineer Baker Hicks

National Grid	378601.9	E
Coordinates	186379.5	N

Project No. PC248745 - Phase 1

Borehole BH107

Ground Level 2.95 m OD

[illegible]

Remarks



Symbols and abbreviations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020

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Figure Sheet 7 of 7
05/02/2025



BOREHOLE RECORD - Cable Percussion

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH108
Client	National Grid	National Grid Coordinates	378582.9 E 186364.4 N	Ground Level	3.05 m OD

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
0.25	D				TOPSOIL: Grass over very soft dark brown slightly sandy organic clay with occasional rootlets and roots up to 20mm in diameter.			
0.25	ES					0.40		2.65
0.25			PID: <0.1 ppm		Soft bluish grey slightly sandy CLAY.			
0.25	HV		10/12/11 kPa					
0.40 - 1.00	B		w: 54 %			1.00		2.05
0.50	D				Spongy dark brown fibrous PEAT.			
0.50	ES							
0.50			PID: <0.1 ppm					
0.50	HV		37/40/38 kPa					
1.00			PID: <0.1 ppm					
1.10	D							
1.10	ES							
1.20 - 1.65		1.20 (0.00)		S0*/450mm				
1.20 - 1.65	D							
1.20 - 2.50	B							
2.00	D							
2.50 - 2.95		2.50 (1.80)		S0*/450mm				
2.50 - 3.50	B							
3.00	D							
3.50 - 3.95		3.50 (2.10)		S0*/450mm				
3.50 - 3.95	D							
3.50 - 4.30	B							
4.00	D							
4.40	D		w: 25 %		Stiff greyish brown slightly sandy gravelly CLAY. Gravel is angular to subangular fine to coarse of sandstone and quartzite.	4.30		-1.25
4.60	UT	4.50 (DRY)	31 blows					
4.60 - 5.50	B		w: 23 %					
5.05 - 5.20	D							
5.40	D							
5.50 - 5.95		5.50 (5.10)		S35	Medium dense greyish brown slightly sandy GRAVEL. Gravel is subangular to subrounded fine to coarse of sandstone and quartzite.	5.50		-2.45
5.50	D							
5.50 - 6.50	B							
6.00	D							
6.50 - 6.95		6.50 (-0.12)		C33				
6.50 - 7.50	B							
7.00	D							
7.50 - 7.95		7.50 (2.10)		C14				
7.70 - 8.50	B							
8.00	D		w: 19 %		Stiff dark brown slightly sandy gravelly CLAY. Gravel is angular to subangular fine to coarse of sandstone and quartzite.	7.70		-4.65
8.50 - 8.95	UT	8.50 (7.70)	52 blows					
8.95 - 9.10	D		w: 21 %					
9.00 - 10.00	B							
9.50	D							
10.00 - 10.45		9.00 (9.00)		S27				

Boring				Progress				Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed
1.20	0.30	Inspection Pit	MR/SS	0.00			11/09/24	09:00	5.80	5.80	+0.45	20	
14.66	0.20	Cable Percussion	MR/SS	11.50	9.00	11.30	11/09/24	17:00					
				11.50	9.00	DRY	12/09/24	08:00					
				14.66	9.00	DRY	12/09/24	09:00					

Remarks  Inspection pit hand excavated to 1.20m depth and no services were found.
ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub.
In-situ permeability test carried out at 6.00m.

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Figure Sheet 1 of 2
05/02/2025

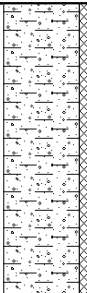
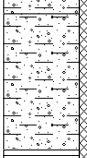
Symbols and abbreviations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged in accordance with BS5930:2015 + A1:2020



BOREHOLE RECORD - Cable Percussion

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH108
Client	National Grid	National Grid Coordinates	378582.9 E 186364.4 N	Ground Level	3.05 m OD

Sampling			Properties		Strata	Scale 1:50			
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)	
10.00 - 10.45	D	9.00 (11.30)		S21					
10.50 - 11.50	B								
11.00	D								
11.50 - 11.95	D								
11.50 - 11.95	D								
12.00 - 12.90	B	9.00 (DRY)		S50/ 120mm	Stiff grey slightly sandy gravelly CLAY with many mudstone lithorelics up to 100mm in size. Gravel is subangular to angular fine to coarse of mudstone and sandstone.	12.00		-8.95	
12.50	D								
13.20 - 13.46	D				Extremely weak dark grey MUDSTONE with occasional coal fragments up to 15mm in diameter.	12.90			
13.20 - 13.46	D								
13.50 - 14.50	B	9.00 (DRY)		S50/ 85mm					
14.00	D								
14.50 - 14.66	D								
14.50 - 14.66	D								
					End of Borehole	14.66		-11.61	

Boring				Progress					Groundwater				
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH109
Client	National Grid	National Grid Coordinates	378581.1 E 186340.3 N	Ground Level	3.04 m OD

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
0.10 - 0.30	B		PID: <0.1 ppm 15/16/14 kPa w: 60 %	S0	TOPSOIL: Grass over very soft dark brown slightly sandy organic clay with occasional rootlets and roots up to 20mm in diameter.	0.30		2.74
0.25	D				Very soft bluish grey slightly sandy CLAY with occasional roots up to 10mm in diameter.			
0.25	ES							
0.25	HV				Spongy dark brown fibrous PEAT with large pocket of clay (up to 100mm) in size.	1.10		1.94
0.40 - 1.10	B							
0.50	D		PID: <0.1 ppm 18/19/16 kPa	S0	Between 1.10m - 5.80m: bluish grey clay noted.			
0.50	ES							
0.50	HV							
1.00	D							
1.00	ES							
1.20 - 1.65		1.20 (0.00)						
1.20 - 1.65	D		w: 84 % 2 blows	S0				
1.20 - 2.50	B							
2.00	D							
2.50 - 2.95	UT	2.50 (1.60)						
2.50 - 3.50	B		4 blows w: 494 %	S0				
3.00	D							
3.50 - 3.95		3.20 (1.90)						
3.50 - 3.95	D							
3.50 - 4.50	B							
4.00	D		4 blows w: 494 %	S0				
4.50 - 4.95	UT	2.60 (4.00)						
4.50 - 5.50	D							
5.50 - 5.95		5.50 (2.60)						
5.50	D		Dense dark brown sandy GRAVEL with a low cobble content of subrounded sandstone and quartzite. Gravel is subangular to subrounded fine to coarse of sandstone and quartzite.	S13		5.80		-2.76
5.80 - 6.50	B							
6.00	D							
6.50 - 6.95		6.50 (-0.12)						
6.50 - 7.50	B		Firm brownish grey slightly sandy slightly gravelly CLAY with occasional sand/gravel lenses up to 200mm thick. Gravel is subangular to subrounded fine to coarse of sandstone and rare coal.	S33				
7.00	D							
7.50 - 7.95		7.50 (0.00)						
7.50 - 8.50	B							
8.00	D							
8.50 - 8.95		8.50 (0.00)	w: 19 %	S22		8.60		-5.56
8.60 - 9.50	B							
9.00	D							
9.50 - 9.95	UT	9.50 (DRY)						
9.95 - 10.10	D		51 blows	S0				
10.00 - 11.00	B							

Remarks Symbols and abbreviations are explained on the accompanying key sheets. All dimensions are in metres.		Inspection pit hand excavated to 1.20m depth and no services were found.	Logged by	SI
		ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub.		
		Chiselling 6.60m 6.80m 40mins and 14.20m - 14.30m 30mins. Flush:Air/Mist	Figure	Sheet 1 of 6
		Borehole backfilled on completion GL to 49.50 Bentonite pellets.		05/02/2025
		Logged in accordance with BS5930:2015 + A1:2020		

Remarks Inspection pit hand excavated to 1.20m depth and no services were found.
ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub.
Chiselling 6.60m 6.80m 40mins and 14.20m - 14.30m 30mins. Flush: Air/Mist
Borehole backfilled on completion GL to 49.50 Bentonite pellets.

Logged by SI

Figure Sheet 1 of 6
05/02/2025



BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH109
Client	National Grid	National Grid Coordinates	378581.1 E 186340.3 N	Ground Level	3.04 m OD

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
10.50	D							
11.00 - 11.45		9.50 (DRY)		S27				
11.00 - 11.45	D							
11.50 - 12.50	B				Below 11.50:m, becoming stiff.			
12.00	D		w: 13 %					
12.50 - 12.95	UT	9.50 (DRY)	58 blows					
12.50 - 13.30	B							
12.50 - 12.95			cu: 186 kPa					
12.95 - 13.10	D							
13.00	D							
13.30 - 14.00	B				Extremely weak grey and dark grey MUDSTONE.	13.30		-10.26
13.50	D							
14.00 - 14.21		9.50 (13.30)		S50/ 60mm				
14.00 - 14.21	D							
14.30 - 14.32		9.50 (13.30)		S50/ 10mm	Borehole continued using alternative techniques - see next page	14.30		-11.26
14.30 - 14.32	D							

Boring				Progress				Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed
				14.30	14.30	0.00	03/09/24	08:00					
				21.00	14.30	1.60	03/09/24	17:00					
				21.00	14.30	-0.80	04/09/24	08:00					
				34.50	14.30	1.20	04/09/24	17:00					

Remarks


Symbols and abbreviations are explained on the accompanying key sheets.
All dimensions are in metres.

Logged by

SI

Figure

Sheet 2 of 6
05/02/2025

 GEOTECHNICS

Logged in accordance with BS5930:2015 + A1:2020

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH109
Client	National Grid	National Grid Coordinates	378581.1 E 186340.3 N	Ground Level	3.04 m OD

Sampling/Testing		Drilling					Strata		Scale 1:50		
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
18.20 - 18.25	C						Borehole continued using rotary drilling techniques - see below				
		14.30 - 15.00	14.30	43 0	0	AZCL		Between 14.30m - 14.70m, assumed zone of core loss.			
						NI		Between 14.70m - 15.00m, non-intact, recovered as angular and subangular fine to coarse gravel. Between 15.00m - 16.00m. assumed zone of core loss.			
		15.00 - 16.50	14.30	33 0	0	AZCL					
						NI		Between 16.00m - 16.50m, non-intact, recovered as angular to subangular fine to coarse gravel with cobble. Between 16.50m 17.00m. assumed zone of core loss.			
		16.50 - 18.00	14.30	67 33	0	AZCL		Between 17.00m - 18.30m, discontinuities subhorizontal, very closely spaced, planar, stepped, rough and clean.			
						>25					
		18.00 - 18.50	14.30	100 80	0			Between 18.70m - 18.90m, non-intact, recovered as angular to subangular fine to coarse gravel. Between 19.20m - 19.48m. discontinuity inclined (70-80 degrees) stepped, rough with occasional gypsum veins (<1mm thick). Between 19.50m - 19.60m. assumed zone of core loss. Between 19.60m - 19.70m, non-intact, recovered as angular to subangular fine to coarse gravel.			
		18.50 - 18.80	14.30	100 40	0	18					
		18.80 - 19.50	14.30	79 50	14	NI					
						6					
		19.50 - 21.00	14.30	93 77	7	AZCL NI					

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
1.20	0.30	Inspection Pit	MR/TS	0.00			29/08/24	08:00	0.10	0.00	0.00	20		
14.30	0.20	Cable Percussion	MR/TS	11.45	9.50	DRY	29/08/24	18:00	6.00	6.00	-0.12	20		
49.50	0.12	Rotary Core	CJ/IJ	11.45	9.50	5.90	30/08/24	08:00						
				14.30	9.50	13.30	30/08/24	14:00						

Remarks	AGS Inspection pit hand excavated to 1.20m depth and no services were found. ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub. Chiselling 6.60m 6.80m 40mins and 14.20m - 14.30m 30mins. Flush:Air/Mist Borehole backfilled on completion GL to 49.50 Bentonite pellets.	Logged by	SI
Symbols and abbreviations are explained on the accompanying key sheets. All dimensions are in metres.	Logged in accordance with BS5930:2015 + A1:2020	Figure	Sheet 3 of 6 05/02/2025
			

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH109
Client	National Grid	National Grid Coordinates	378581.1 E 186340.3 N	Ground Level	3.04 m OD

Sampling/Testing		Drilling					Strata		Scale 1:50							
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)					
23.35 - 23.48	C	19.50 - 21.00	14.30	93 77	7	13		Between 20.30m - 20.41m. non-intact, recovered as angular to subangular fine to coarse gravel. Between 20.80m - 21.00m. discontinuity subvertical inclined stepped, rough with occasional gypsum veins up to (1mm thick) Between 21.00m - 21.30m. assumed zone of core loss. Between 21.30m - 21.70m. discontinuities very closely spaced.	21.70		-18.66					
						NI										
						>25										
						10										
		21.00 - 22.50	14.30	80 67	0	AZCL	Very strong dark grey SILTSTONE with many subhorizontal (15 degrees) black carbonaceous lenses up to (2mm thick). Discontinuities are subhorizontal (15 degrees) very closely and closely spaced, planar, stepped, rough.	Between 21.70m - 21.80m. non-intact, recovered as angular to subangular fine to coarse gravel. Between 22.40m - 22.50m, discontinuity subvertical (80 degrees) stepped, rough with occasional gypsum up to (1mm thick) on surface. Between 23.10m - 23.30m, discontinuity inclined (40-60 degrees) stepped, rough and clean.	23.70		-20.66					
						>25										
						NI										
						10										
		22.50 - 24.00	14.30	100 90	27											
24.00 - 24.70	14.30	89 61	43	NI	Very strong grey SILTSTONE. Discontinuities are subhorizontal (0-15 degrees) closely spaced, stepped, rough and clean.	At 23.90m. discontinuity inclined (70 degrees) planar, rough and clean. Between 24.00m - 24.27m, non-intact, recovered as angular to subangular fine to coarse gravel. Between 24.50m - 24.70m. discontinuity closely spaced subvertical (80-90 degrees) undulating, rough with gypsum vein up to (2mm thick). Between 24.70m - 24.80m and 25.00m - 25.40m. non-intact, recovered as angular to subangular fine to coarse gravel. Between 25.55m - 25.65m, discontinuity inclined (45-60 degrees) planar, rough and clean. Between 25.60m - 27.00m driller noted traces of coal.	25.84		-22.80							
				7												
				NI												
				10												
24.70 - 25.50	14.30	100 75	0	NI												
				10												
				NI												
				13												
25.50 - 27.00	14.30	96 73	17	0	Medium strong dark grey SILTSTONE with many subhorizontal black carbonaceous lenses up to (2mm thick). Discontinuities are predominantly subhorizontal (15 degrees) very closely spaced, planar, rough and clean.	Between 25.65m - 25.75m, non-intact, recovered as angular to subangular fine to coarse gravel. Between 25.84m - 25.93m, non-intact, recovered as angular to subangular fine to coarse gravel. Between 26.90m - 27.00m, discontinuity inclined (60 degrees) stepped, rough and clean. Between 27.65m - 28.00m. discontinuity inclined (70-80 degrees) stepped, rough and clean. Between 28.00m - 28.20m, discontinuities inclined (80-90 degrees), stepped, rough and clean. Between 28.24m - 28.30m, non-intact, recovered as angular to subangular fine to coarse gravel.	26.75		-23.72							
				NI												
				>25												
				8												
26.40 - 26.50	C	27.00 - 28.50	14.30	100 83	33		Very strong dark grey SILTSTONE. Discontinuity is closely spaced, stepped, rough and clean.									
		28.50 - 30.00	14.30	100 80	20											

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater
				14.30	14.30	0.00	03/09/24	08:00						
				21.00	14.30	1.60	03/09/24	17:00						
				21.00	14.30	-0.80	04/09/24	08:00						
				34.50	14.30	1.20	04/09/24	17:00						

BOREHOLE RECORD - Cable Percussion and Rotary

Project

National Grid - 101677 Margam TATA

Client

National Grid

Engineer

Baker Hicks

National Grid Coordinates

378581.1 E
186340.3 N

Project No.

PC248745 - Phase 1

Borehole

BH109

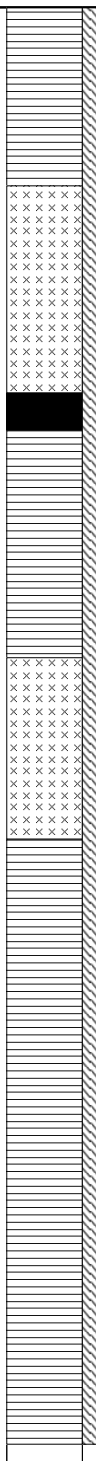
Ground Level

3.04 m OD

Sampling/Testing		Drilling					Strata		Scale 1:50		
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
30.40 - 30.57	C	30.00 - 31.50	14.30	100 99	37	8		Between 28.40m - 28.50m, discontinuity inclined (70 degrees) stepped, rough and clean.			
		31.50 - 33.00	14.30	100 99	30			Between 28.80m - 28.90m, non-intact, recovered as angular to subangular fine to coarse gravel.			
		33.00 - 34.50	14.30	100 90	22			Between 29.10m - 29.20m and 29.52m - 29.60m. discontinuities inclined (45-60 degrees) planar, rough and clean.			
34.03 - 34.22	C					7		At 31.60m, discontinuity inclined (45 degrees) stepped, rough.	34.50		-31.46
								At 31.75m - 31.80m, discontinuity inclined (60 degrees) stepped, rough and clean.			
								Between 31.90m - 32.00m, discontinuity inclined (70 degrees) stepped, rough.			
34.50 - 34.77	C	34.50 - 36.00	14.30	97 73	45		Weak to medium strong dark grey MUDSTONE. Discontinuities are subhorizontal (0-15 degrees) closely spaced, stepped, rough and clean.	Between 32.25m - 32.55m, discontinuity inclined (50-60 degrees) stepped, rough and clean.	35.40		-32.36
								At 32.35m, discontinuity inclined at (80 degrees) stepped, rough and clean.			
								Between 32.56m - 32.65m, discontinuity inclined (60-70 degrees) stepped, rough and clean.			
34.91 - 35.00	C					6	Medium strong to strong grey SILTSTONE with occasional very strong ironstone nodules (up to 80mm in diameter) Discontinuities are subhorizontal, closely spaced rough and clean.	At 32.65m and 33.20m discontinuity inclined (40-50 degrees) stepped, rough and clean.			
								Between 33.35m - 33.42m, non-intact, recovered as angular to subangular fine to coarse gravel.			
								Between 33.58m - 33.64m, 33.66m - 33.71m, non-intact, recovered as angular to subangular fine to coarse gravel.			
38.00 - 38.25	C	36.00 - 37.50	14.30	93 73	15	AZCL		At 33.76m, discontinuity inclined (40-60 degrees) stepped, rough.	39.00		-35.97
								Between 33.88m - 33.96m, discontinuities inclined (20 degrees) closely spaced, planar, rough and clean.			
								Between 35.00m - 35.10m, non-intact, recovered as angular to subangular fine to coarse gravel.			
38.12 - 38.24	C					8		Between 35.22m - 35.32m, non-intact, recovered as angular to subangular fine to coarse gravel.			
								Between 36.00m - 36.10m, assumed zone core loss.			
								Between 36.40m - 36.48m, non-intact, recovered as angular to subangular fine to coarse of gravel and ironstone cobble.			
38.74 - 38.92	C	37.50 - 39.00	14.30	100 87	53			At 36.40m and 36.55m, very strong ironstone nodules up to (80mm in diameter).			
								Between 26.53m - 36.63m, non-intact, recovered as angular to subangular fine to coarse gravel.			
								Between 36.58m - 36.65m. becoming very weak and dark			
38.00 - 38.25	C					6		Between 36.58m - 36.65m. becoming very weak and dark			
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
38.74 - 38.92	C					6					
38.00 - 38.25	C					6					
38.12 - 38.24	C					6					
								</			

BOREHOLE RECORD - Cable Percussion and Rotary

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH109
Client	National Grid	National Grid Coordinates	378581.1 E 186340.3 N	Ground Level	3.04 m OD

Sampling/Testing		Drilling					Strata		Scale 1:50		
Sample / SPT Depth	SPT N / Type	Core Run/Depth (Core Dia/Time)	Depth Cased & (to Water)	TCR/ SCR (%)	RQD (%)	FI	General	Detail	Depth	Legend	Level (m OD)
42.03 - 42.16	C	39.00 - 40.50	14.30	60 0	0	NI		grey. At 37.20m, very strong ironstone nodule.			
		40.50 - 42.00	14.30	73 33	7	19		Between 38.10m - 38.22m, very strong ironstone.			
						NI		Between 38.22m - 32.33m, non-intact, recovered as angular to subangular fine to coarse gravel.			
						7	Medium strong to strong black carbonaceous SILSTONE. Discontinuities are subhorizontal closely and medium spaced, planar, smooth and clean.	Between 39.00m - 39.60m, assumed zone of core loss.			
		42.00 - 43.50	14.30	80 47	25			Between 39.60m - 40.40m, non-intact, recovered as angular to subangular fine to coarse gravel.			
								Between 40.40m - 40.66m, siltstone layer.			
						NI	Weak black COAL. recovered as angular to subangular fine to coarse gravel with pyrite crystals	Between 40.66m - 41.18m, non-intact, recovered as angular to subangular fine to coarse gravel.			
							Weak to medium strong light grey MUDSTONE. Discontinuities are subhorizontal (0-15 degrees) closely and medium spaced, stepped.	Between 42.80m - 43.50m, non-intact, recovered as angular to subangular fine to coarse gravel.			
		43.50 - 45.00	14.30	100 90	73	3					
							Medium strong to strong grey SILTSTONE with rare very strong light grey ironstone nodules. Discontinuities are subhorizontal (0-15 degrees) closely and medium spaced stepped, rough and clean.	Between 44.62m - 44.75m, non-intact, recovered as angular to subangular fine to coarse gravel.			
		45.00 - 46.50	14.30	100 90	50			Between 44.75m - 44.90m and 45.00m - 45.10m, discontinuities inclined (40-60 degrees) stepped, rough and clean.			
						7	Very weak to weak dark grey MUDSTONE with occasional very strong ironstone nodules. Discontinuities are closely spaced planar, smooth and clean.	Between 45.00m - 45.30m, discontinuities inclined (60-80 degrees) undulating, rough and clean.			
		46.50 - 48.00	14.30	100 73	17						
		48.00 - 49.50	14.30	93 87	21	AZCL					
						12					
						NI					
						1					
						NI					
						2					
								End of Borehole	49.50		-46.46

Boring				Progress					Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed	Remarks on Groundwater

BOREHOLE RECORD - Cable Percussion

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH110
Client	National Grid	National Grid Coordinates	378577.5 E 186301.0 N	Ground Level	3.07 m OD

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
0.10 - 0.40	B				TOPSOIL: Grass over very soft dark brown slightly sandy organic clay with occasional rootlets and roots up to 20mm in diameter.			
0.25	D					0.40		2.67
0.25	ES		PID: <0.1 ppm 10/16/11 kPa		Very soft blueish grey slightly sandy CLAY.			
0.25								
0.50	HV							
0.50	D							
0.50	ES		PID: <0.1 ppm 38/39/40 kPa		Spongy dark brown fibrous PEAT.	1.30		1.77
0.50 - 1.00	B							
0.50								
0.50	HV							
1.00	D		PID: 0.10 ppm					
1.00	ES							
1.20 - 1.65		1.20 (0.00)		S0*/ 450mm				
1.20 - 1.65	D							
1.30 - 2.50	B							
2.00	D							
2.50 - 2.95		2.50 (DRY)		S0*/ 450mm				
2.50 - 2.95	D							
2.50 - 3.50	B		w: 473 %					
3.00	D							
3.50	UT	3.50 (DRY)	3 blows					
3.50 - 4.50	B		w: 611 %					
3.95 - 4.10	D							
4.30	D		w: 600 %		Below 4.30m: becoming slightly clayey fibrous peat.			
4.50 - 4.95		4.50 (DRY)		S0*/ 450mm				
4.50 - 4.95	D							
5.10 - 5.60	B					5.10		-2.03
5.30	D		w: 10 %		Stiff to very stiff greyish brown slightly sandy gravelly CLAY. Gravel is angular to subangular fine to coarse of sandstone and quartzite.			
5.50 - 6.60	B					5.60		-2.53
5.60 - 6.60	B				Medium dense greyish brown slightly sandy GRAVEL. Gravel is subangular to subrounded fine to coarse of sandstone and quartzite,			
5.70 - 6.15		5.70		S31				
6.00	D							
6.60 - 7.05		6.60 (1.90)		S26				
6.60 - 7.50	B							
7.00	D							
7.50 - 7.95		7.50 (2.10)		C15		7.60		-4.53
7.60 - 8.80	B				Stiff grey slightly sandy gravelly CLAY. Gravel is angular to subangular fine to coarse of sandstone and quartzite.			
8.50	D		w: 16 %					
8.80 - 9.25		8.80 (7.10)		S30				
8.80	D							
9.00 - 10.00	B							
9.50	D							
10.00 - 10.45	UT	8.80 (8.00)	54 blows w: 17 %					

Boring				Progress				Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed
1.20	0.30	Inspection Pit	MR/TS	0.00			10/09/24	08:00	0.00		0.00	20	
12.22	0.20	Cable Percussion	MR/TS	12.05	8.80	11.20	10/09/24	17:00	6.00	6.00	1.90	20	
				12.05	8.80	-0.46	11/09/24	08:00					
				12.22	8.80	-0.12	11/09/24	09:00					

Remarks  Inspection pit hand excavated to 1.20m depth and no services were found.
ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub.
Groundwater noted as artesian at 6.10m.
Chiselling 12.00 - 12.10m 30mins and 12.10 - 12.20m 30 mins.

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Figure Sheet 1 of 2
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BOREHOLE RECORD - Cable Percussion

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH110
Client	National Grid	National Grid Coordinates	378577.5 E 186301.0 N	Ground Level	3.07 m OD

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
10.45 - 10.60	D							
11.00 - 12.00	B							
11.50 - 11.95		8.80 (10.30)		S32				
11.50	D					11.90		-8.83
11.50 - 11.95	D				Weak dark grey fine grained SANDSTONE. Recovered as angular fine to coarse gravel.			
12.00 - 12.20	D							
12.05 - 12.07		8.80 (11.20)		S50/10mm		12.20		-9.13
12.05 - 12.06	D				End of Borehole			

Boring				Progress					Groundwater				
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed

BOREHOLE RECORD - Cable Percussion

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH111
Client	National Grid	National Grid Coordinates	378625.1 E 186324.6 N	Ground Level	3.03 m OD

Sampling			Properties		Strata	Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
0.25	D				TOPSOIL: Grass over very soft dark brown slightly sandy organic clay with occasional rootlets and roots up to 20mm in diameter.			
0.25	ES					0.40		2.63
0.25			PID: <0.1 ppm		Very soft bluish grey slightly sandy CLAY with occasional pockets up to 15mm in size of peat.			
0.25	HV		12/10/13 kPa					
0.40 - 1.20	B		w: 40 %					
0.50	D							
0.50	ES					1.30		1.73
0.50			PID: <0.1 ppm		Spongy dark brown fibrous PEAT.			
0.50	HV		18/19/17 kPa					
1.00	D							
1.00	ES							
1.00			PID: <0.1 ppm					
1.20 - 1.65		1.20 (0.00)		S0*/450mm				
1.20	D							
1.30 - 2.50	B							
2.00	D							
2.50 - 2.95		2.50 (1.80)		S0*/450mm				
2.50 - 3.50	B							
3.00	D							
3.50 - 3.95		3.50 (2.10)		S0*/450mm	Very soft bluish grey CLAY with large pockets up to 100mm in size of peat.	3.50		-0.47
3.50	D							
3.50 - 4.50	B							
4.00	D							
4.50 - 4.95		4.50 (3.30)		S2				
4.50	D					4.80		-1.77
4.80 - 5.50	B		w: 22 %		Stiff dark grey slightly gravelly sandy CLAY. Gravel is angular to subangular fine to coarse of sandstone.			
5.00	D							
5.80 - 6.25		5.80 (4.90)		C21	Medium dense brownish grey slightly sandy GRAVEL. Gravel is subangular to subrounded fine to coarse of sandstone and quartzite.	5.80		-2.77
5.80 - 6.00	D				Stiff to very stiff brownish grey slightly sandy gravelly CLAY. Gravel is angular to subangular fine to coarse sandstone and quartzite.	6.00		-2.97
5.80 - 6.50	D							
6.00 - 7.00	B							
6.60	D							
7.20 - 7.65		7.20 (DRY)		S35				
7.20	D							
7.20 - 8.50	B							
8.00	D		w: 17 %					
8.50	UT	7.30 (DRY)	59 blows w: 11 %					
8.95 - 9.10	D							
9.00 - 10.00	B							
9.50	D							
10.00 - 10.45		7.30 (DRY)		S32				

Remarks Symbols and abbreviations are explained on the accompanying key sheets. All dimensions are in metres.		Inspection pit hand excavated to 1.20m depth and no services were found.	Logged by	SI
		ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub.		
		Chiselling 13.80 - 14.00m 30mins.	Figure	Sheet 1 of 2
		53mm standpipe installed GL to 1.00m plain pipe, 1.00m to 4.50m bgl slotted pipe, 4.50m to base bentonite backfill.		05/02/2025
		Logged in accordance with BS5930:2015 + A1:2020		

Remarks Inspection pit hand excavated to 1.20m depth and no services were found.
 ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub.
 Chiselling 13.80 - 14.00m 30mins.
 53mm standpipe installed GL to 1.00m plain pipe, 1.00m to 4.50m bgl slotted pipe, 4.50m to base bentonite backfill.

Logged in accordance with BS5930:2015 + A1:2020

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Figure Sheet 1 of 2
05/02/2025

GEOTECHNICS

BOREHOLE RECORD - Cable Percussion

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH111
Client	National Grid	National Grid Coordinates	378625.1 E 186324.6 N	Ground Level	3.03 m OD

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
10.00	D							
10.50 - 11.50	B							
11.00	D		w: 11 %					
11.50 - 11.95	UT	7.30 (DRY)	61 blows w: 11 %					
11.95 - 12.10	D							
12.30 - 13.00	B				Extremely weak grey MUDSTONE, recovered as gravel.	12.30		-9.27
12.50	D							
13.00 - 13.37		7.30 (DRY)		S50/ 220mm				
13.00 - 13.37	D							
13.00 - 14.00	B							
13.50	D							
14.00 - 14.29		7.30 (DRY)		S50/ 145mm				
14.00	D				End of Borehole	14.29		-11.26

Boring				Progress					Groundwater				
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed

BOREHOLE RECORD - Cable Percussion

Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
Client	National Grid	National Grid Coordinates	378640.5 E 186097.3 N	Borehole	BH112
				Ground Level	3.57 m OD

Sampling			Properties		Strata	Scale 1:50		
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
0.10 - 0.30	B				TOPSOIL: Grass over very soft dark brown slightly sandy clay with occasional rootlets and many roots (up to 15mm in diameter).			
0.25	D					0.30		3.27
0.25	ES				Soft brown mottled grey slightly sandy CLAY with occasional rootlets.			
0.25			PID: <0.1 ppm 18/15/16 kPa			0.70		2.87
0.30 - 0.70	HV				Soft to firm brownish grey slightly sandy CLAY with rare rootlets.			
0.50	B							
0.50	D							
0.50	ES							
0.50			PID: <0.1 ppm 39/40/39 kPa			1.60		1.97
0.70 - 1.20	HV				Very soft bluish grey and brown slightly sandy CLAY.			
1.00	B		w: 39 %					
1.00	D							
1.00	ES							
1.20 - 1.65	UT	1.20 (0.80)	PID: <0.1 ppm 6 blows			2.30		1.27
1.60 - 2.30					Very soft grey slightly sandy organic CLAY with many pockets (up to 80mm in size) of peat.			
1.65 - 1.80	B							
1.65 - 1.80	D		w: 56 %					
2.00	D							
2.30 - 2.75		2.30 (1.30)		S1				
2.30 - 2.75	D							
2.30 - 3.20	B							
3.00	D							
3.20 - 3.65		3.20 (3.20)		S0*/ 450mm				
3.20 - 3.65	D							
3.20 - 4.50	B							
4.00	D							
4.50	EW							
4.50 - 4.65	UT	4.50 (4.30)	7 blows					
4.50 - 5.50	B							
5.20	D		w: 230 %					
5.50 - 5.95		5.50 (5.30)		S6				
5.50 - 5.95	D							
5.80 - 6.10	D							
6.10 - 6.50	B					6.10		-2.53
6.30	D				Very soft dark grey sandy organic CLAY.			
6.50 - 6.95		6.50 (6.50)		S0*/ 450mm				
6.50 - 6.95	D							
6.50 - 7.30	B							
7.10	D		w: 31 %					
7.40	D							
7.50 - 7.95		7.50 (1.00)		C43	Dense brown sandy GRAVEL with a low cobble content of subangular sandstone and quartzite. Gravel is subangular to subrounded fine to coarse sandstone and quartzite.	7.30		-3.73
7.50 - 8.50	B							
8.00	D							
8.50 - 8.95		8.50 (0.10)		C17	At 8.50m, medium dense.			
8.50 - 9.20	B							
9.00	D							
9.30	D							
9.40 - 9.85		9.40 (4.10)		S24	Stiff dark grey slightly sandy slightly gravelly CLAY. Gravel is angular to subangular fine to coarse sandstone.	9.30		-5.73
9.40 - 9.85	D							
10.00 - 11.00	B							

Boring				Progress				Groundwater					
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed
1.20	0.30	Inspection Pit	MR/TS	0.00			22/08/24	08:00	0.80		0.60	20	
14.46	0.20	Cable Percussion	MR/TS	12.50	9.50	DRY	22/08/24	18:00	7.50	7.50	1.00	20	
				12.50	9.50	8.10	27/08/24	08:00					
				14.46	9.50	12.40	27/08/24	12:00					

Remarks Inspection pit hand excavated to 1.20m depth and no services were found. ES sample = 1 x 60ml glass vial, 2 x 258ml amber glass jars and 1 x 1 litre plastic tub. Chiselling 14.20m - 14.40m 30mins. 50mm standpipe - slotted 1.00m - 6.00m with raised cover. Backfill: Bentonite 6.00m - 14.00m, gravel filter 1.00m - 6.00m, Bentonite seal 0.30m - 1.00m, concrete GL - 0.30m.

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Figure Sheet 1 of 2
05/02/2025

BOREHOLE RECORD - Cable Percussion

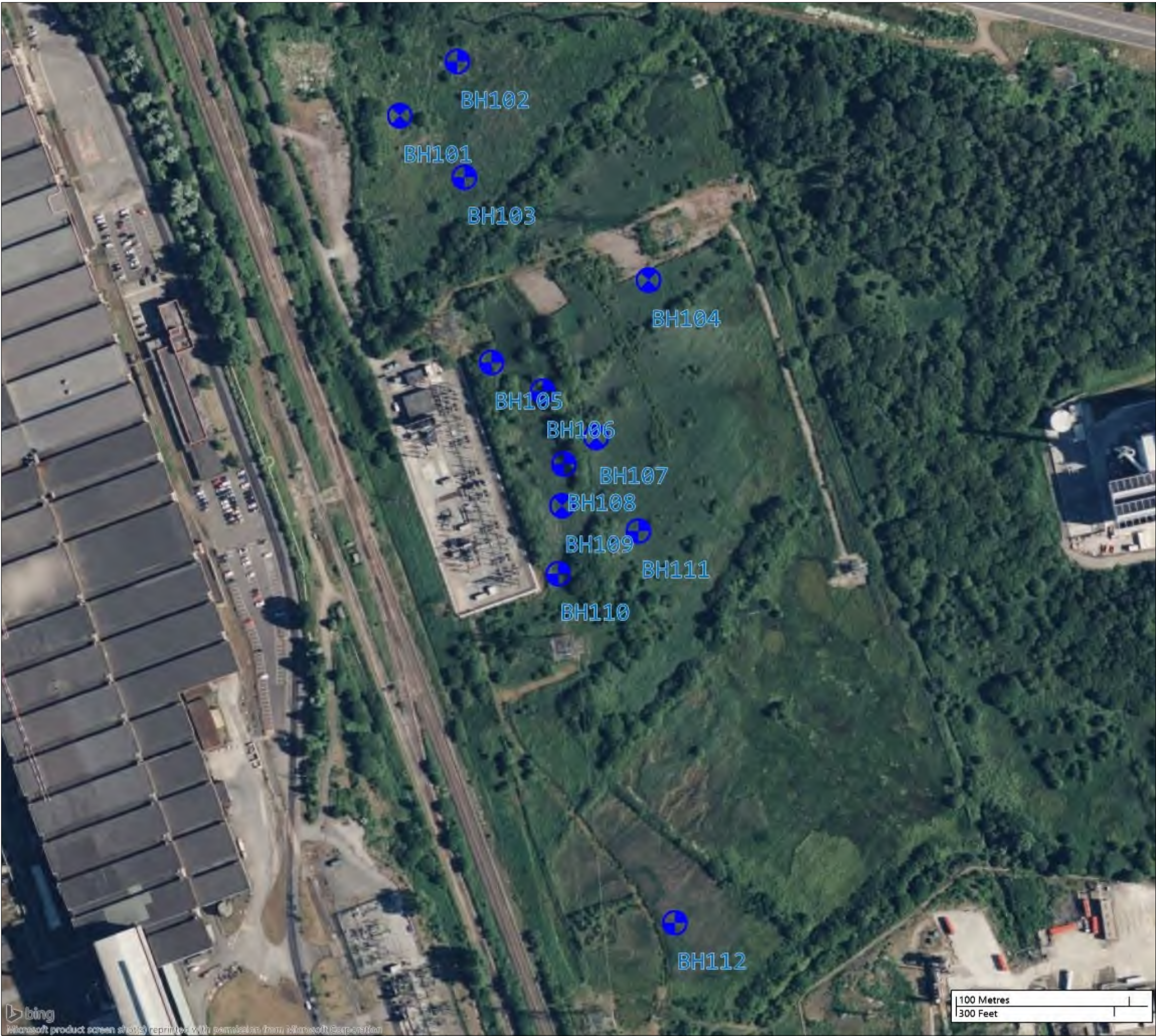
Project	National Grid - 101677 Margam TATA	Engineer	Baker Hicks	Project No.	PC248745 - Phase 1
	Steel Connection			Borehole	BH112
Client	National Grid	National Grid Coordinates	378640.5 E 186097.3 N	Ground Level	3.57 m OD

Sampling			Properties		Strata		Scale 1:50	
Depth	Sample Type	Depth Cased & (to Water)	Results	SPT N	Description	Depth	Legend	Level (m OD)
10.50	D							
11.00 - 11.45		9.50 (DRY)		S24				
11.00 - 11.45	D							
11.50 - 12.50	B							
12.00	D		w: 14 %					
12.50 - 12.95		9.50 (DRY)		S31				
12.50 - 12.95	D							
12.50 - 13.10	B							
12.80	D							
13.10 - 14.00	B				Extremely weak grey MUDSTONE, recovered as angular to subangular fine to coarse gravel.	13.10		-9.53
13.50	D							
14.00 - 14.17		9.50 (12.30)		S50/50mm				
14.00 - 14.17	D							
14.20	D							
14.40 - 14.46		9.50 (12.40)		S50/20mm				
14.40 - 14.46	D				End of Borehole	14.46		-10.89

Boring				Progress					Groundwater				
Depth	Hole Dia.	Technique	Crew	Depth of Hole	Depth Cased	Depth to Water	Date	Time	Depth Struck	Depth Cased	Rose to	in Mins	Depth Sealed

APPENDIX 10

Exploratory Hole Location Plan



Legend

- Locations By Type - CP
- Locations By Type - CP+RC



203 Torrington Avenue
Tile Hill
Coventry
CV4 9AP

Phone: 024 7669 4664
Email: mail@geotechnics.co.uk
www.geotechnics.co.uk

Engineer:
Baker Hicks

Client:
National Grid

Project:
National Grid - 101677 Margam TATA Steel Connection

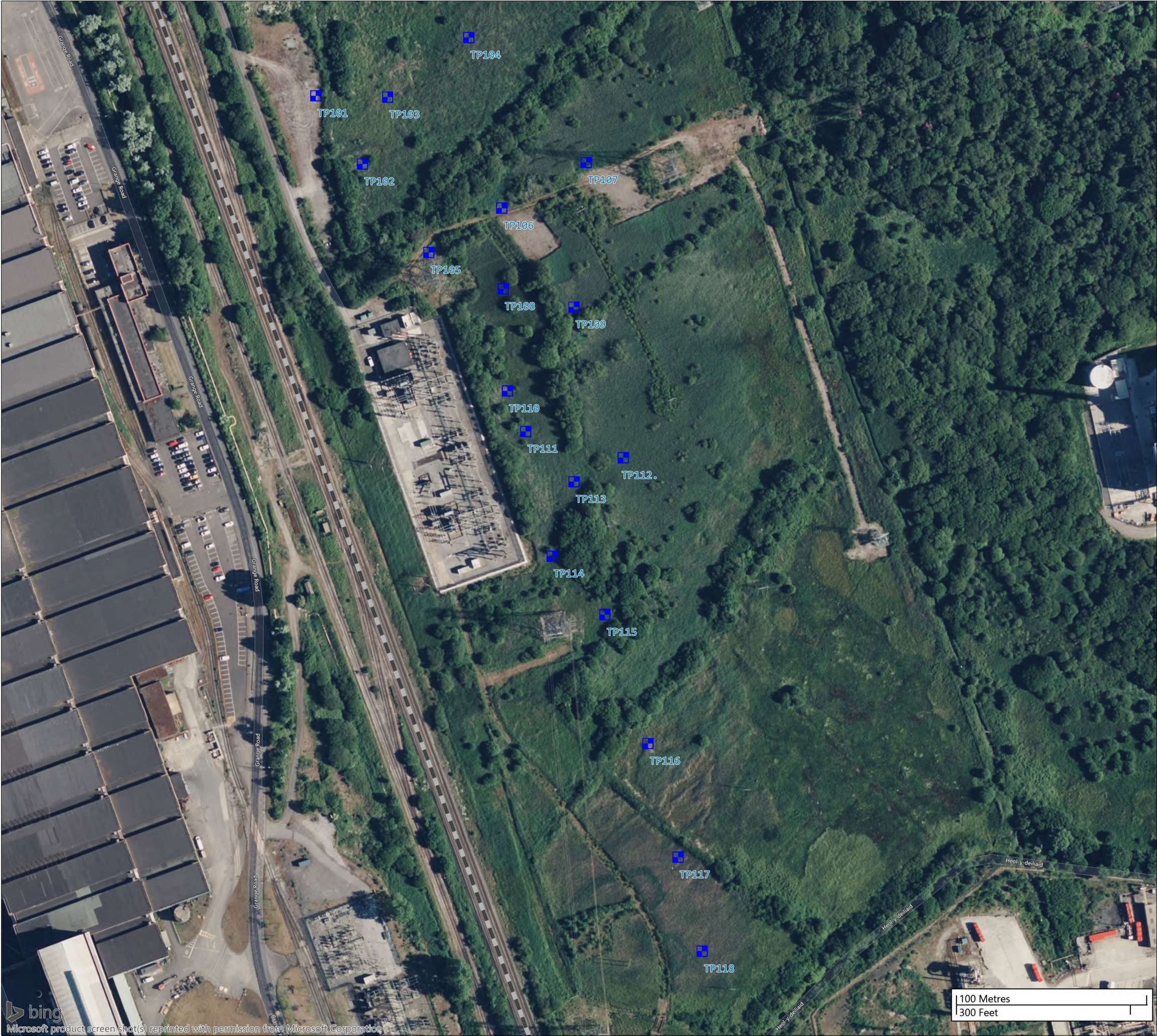
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Exploratory Hole Location Plan

Scale:
1:2200 at A3

Date:
17/10/2024

Project No.:
PC248745 - Phase 1

Exploratory Hole Location Plan



Legend

 Locations By Type - TP



203 Torrington Avenue
Tile Hill
Coventry
CV4 9AP

Phone: 024 7669 4664
Email: mail@geotechnics.co.uk
www.geotechnics.co.uk

Engineer:

Baker Hicks

Client:

National Grid

Project:

National Grid - 101677 Margam TATA Steel Connection

Drawing Title:

Exploratory Hole Location Plan

Scale:

1:2000 at A3

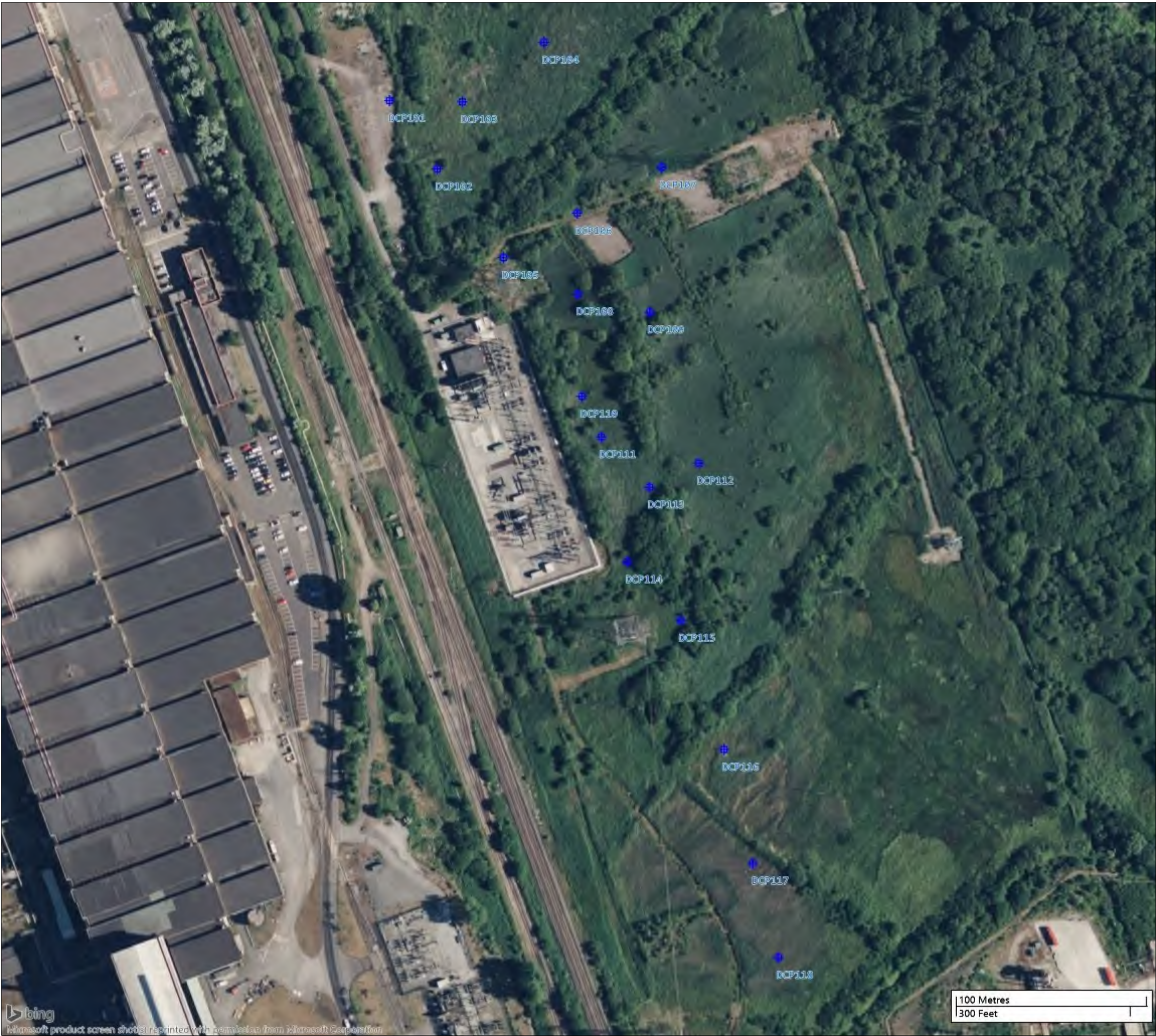
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29/01/2025

Project No.:

PC248745 - Phase 1

Exploratory Hole Location Plan



Legend

 Locations By Type - DCP



203 Torrington Avenue
Tile Hill
Coventry
CV4 9AP

Phone: 024 7669 4664
Email: mail@geotechnics.co.uk
www.geotechnics.co.uk

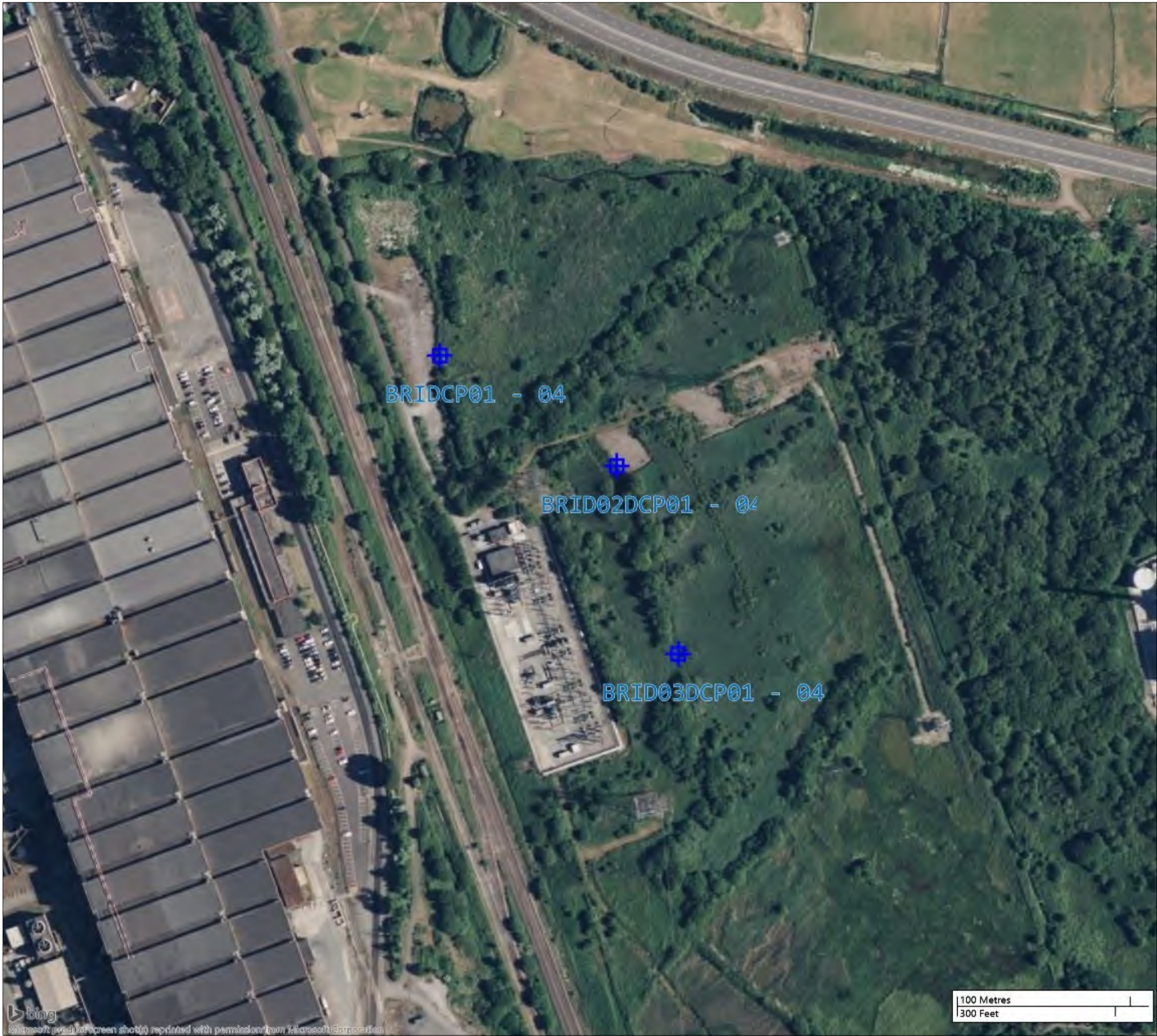
Engineer:
Baker Hicks

Client:
National Grid

Project:
National Grid - 101677 Margam TATA Steel Connection

Drawing Title:
Exploratory Hole Location Plan

Scale: 1:2000 at A3	Date: 17/10/2024
Project No.: PC248745 - Phase 1	Exploratory Hole Location Plan



Legend

 Locations By Type - DCP



203 Torrington Avenue
Tile Hill
Coventry
CV4 9AP

Phone: 024 7669 4664
Email: mail@geotechnics.co.uk
www.geotechnics.co.uk

Engineer:

Baker Hicks

Client:

National Grid

Project:

National Grid - 101677 Margam TATA Steel Connection

Drawing Title:

Exploratory Hole Location Plan

Scale:

1:2200 at A3

Date:

17/10/2024

Project No.:

PC248745 - Phase 1

Exploratory Hole Location Plan