



GEOTECHNICAL BORING RECORD

REPORT NUMBER

15466

CONTRACT Drehid Landfill, Phase 1 (MBT Facility)			BOREHOLE NO. BH1	
CO-ORDINATES			SHEET Sheet 1 of 1	
GROUND LEVEL (m AOD)		RIG TYPE Dando 150	DATE COMMENCED 13/09/2011	
		BOREHOLE DIAMETER (mm) 200	DATE COMPLETED 14/09/2011	
		BOREHOLE DEPTH (m) 8.30		
CLIENT Bord na Mona		SPT HAMMER REF. NO. SPT6	BORED BY M. Connolly	
ENGINEER Tobin		ENERGY RATIO (%) 55	PROCESSED BY I.Reider	

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples				Field Test Results	Standpipe Details
					Ref. Number	Sample Type	Depth (m)	Recovery		
0	Peaty TOPSOIL			0.10						
	MADE GROUND (comprised of 804 material)			0.40						
	Soft, dark brown, PEAT			0.60						
1	Medium dense, brown, clayey sandy fine to coarse GRAVEL with some cobbles				AL4808	B	1.00-1.50		N = 18 (2, 3, 3, 5, 3, 7)	
					AL4809	U B	1.50-2.00 1.50-2.00	recovery%rec		
2	Stiff, grey, sandy gravelly SILT/CLAY with cobbles			2.20	AL4810	B	2.00-2.50		N = 20 (1, 2, 5, 4, 5, 6)	
3					AL4811	B	3.00-3.50		N = 41 (1, 5, 10, 12, 9, 10)	
4	Medium dense to dense, grey, clayey sandy GRAVEL with some cobbles and silty clay lenses			3.50	AL4812	B	4.00-4.50		N = 24 (4, 7, 6, 4, 7, 7)	
5					AL4813	B	5.00-5.50		N = 49 (2, 6, 9, 10, 13, 17)	
6					AL4814	B	6.00-6.50		N = 15 (1, 2, 2, 3, 5, 5)	
7	Dense, grey, silty sandy fine to coarse angular GRAVEL			6.90	AL4815	B	7.00-7.50		N = 57 (5, 4, 13, 11, 15, 18)	
8	End of Borehole at 8.30 m			8.30	AL4816	B	8.00-8.30		N = 50/105 mm (3, 7, 25, 25)	

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HARD STRATA BORING/CHISELLING				WATER STRIKE DETAILS					
From (m)	To (m)	Time (h)	Comments	Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
1.7	1.8	0.5		3.40	3.40	NO	2.90	20	Moderate
8.2	8.3	1.5		6.90	6.90	NO	6.50	20	Moderate

INSTALLATION DETAILS					GROUNDWATER PROGRESS				
Date	Tip Depth	RZ Top	RZ Base	Type	Date	Hole Depth	Casing Depth	Depth to Water	Comments

REMARKS	Sample Legend D - Small Disturbed (tub) B - Bulk Disturbed LB - Large Bulk Disturbed Env - Environmental Sample (Jar + Vial + Tub) U - Undisturbed 100mm Diameter Sample P - Undisturbed Piston Sample W - Water Sample
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GEOTECHNICAL BORING RECORD

REPORT NUMBER

15466

CONTRACT Drehid Landfill, Phase 1 (MBT Facility)			BOREHOLE NO. BH2	
CO-ORDINATES			SHEET Sheet 1 of 1	
GROUND LEVEL (m AOD)		RIG TYPE Dando 150		DATE COMMENCED 16/09/2011
		BOREHOLE DIAMETER (mm) 200		DATE COMPLETED 16/09/2011
		BOREHOLE DEPTH (m) 8.10		
CLIENT Bord na Mona		SPT HAMMER REF. NO. SPT6		BORED BY M. Connolly
ENGINEER Tobin		ENERGY RATIO (%) 55		PROCESSED BY I.Reeder

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples				Field Test Results	Standpipe Details
					Ref. Number	Sample Type	Depth (m)	Recovery		
0	Very soft, dark brown, PEAT									
1	Soft to firm, grey, sandy gravelly SILT/CLAY with cobbles (possible silty sandy gravel with cobbles)			1.20	AL4833	B	1.00-1.50		N = 2 (0, 0, 1, 0, 0, 1)	
2				AL4834	B	2.00-2.50		N = 8 (1, 1, 2, 1, 3, 2)		
3				AL4835	B	3.00-3.50		N = 11 (2, 3, 3, 3, 2, 3)		
4				AL4836	B	4.00-4.50		N = 6 (1, 0, 1, 2, 2, 1)		
5				AL4837	B	5.00-5.50		N = 12 (2, 4, 3, 2, 3, 4)		
6					AL4838	B	6.00-6.50		N = 13 (2, 4, 2, 3, 3, 5)	
7	Dense, grey, silty sandy angular GRAVEL with angular cobbles			6.90	AL4839	B	7.00-7.50		N = 49/225 mm (5, 6, 9, 15, 25)	
8	End of Borehole at 8.10 m			8.10					N = 50/20 mm (13, 12, 50)	
9										
10										

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HARD STRATA BORING/CHISELLING				WATER STRIKE DETAILS					
From (m)	To (m)	Time (h)	Comments	Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
5.7	5.9	0.5		7.30	7.30	NO	6.60	20	Moderate
8	8.1	1.5							
INSTALLATION DETAILS				GROUNDWATER PROGRESS					
Date	Tip Depth	RZ Top	RZ Base	Type	Date	Hole Depth	Casing Depth	Depth to Water	Comments
REMARKS					Sample Legend				
					D - Small Disturbed (tub) B - Bulk Disturbed LB - Large Bulk Disturbed Env - Environmental Sample (Jar + Vial + Tub) U - Undisturbed 100mm Diameter Sample P - Undisturbed Piston Sample W - Water Sample				

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REPORT NUMBER

15466

CONTRACT Drehid Landfill, Phase 1 (MBT Facility)			BOREHOLE NO. BH4	
CO-ORDINATES		RIG TYPE Dando 150		SHEET Sheet 1 of 1
GROUND LEVEL (m AOD)		BOREHOLE DIAMETER (mm) 200		DATE COMMENCED 20/09/2011
		BOREHOLE DEPTH (m) 8.30		DATE COMPLETED 20/09/2011
CLIENT ENGINEER Bord na Mona Tobin		SPT HAMMER REF. NO. SPT6		BORED BY M. Connolly
		ENERGY RATIO (%) 55		PROCESSED BY I.Reeder

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples				Field Test Results	Standpipe Details
					Ref. Number	Sample Type	Depth (m)	Recovery		
0	Very soft, dark brown, PEAT									
1					AL4840	B	1.00-1.50	N = 1 (0, 0, 1, 0, 0, 0)		
2	Soft, grey, sandy SILT with occasional gravel			2.10	AL4841	B	2.00-2.50	N = 1 (0, 1, 0, 0, 1, 0)		
3					AL4842	B	3.00-3.50	N = 5 (1, 0, 1, 1, 2, 1)		
4	Stiff, grey, sandy gravelly SILT/CLAY with many cobbles			4.20	AL4843	B	4.00-4.50	N = 32 (2, 5, 7, 7, 10, 8)		
5					AL4844	B	5.00-5.50	N = 31 (2, 4, 6, 7, 7, 11)		
6					AL4845	B	6.00-6.50	N = 32 (4, 11, 7, 9, 8, 8)		
7					AL4846	B	7.00-7.50	N = 35 (3, 6, 6, 7, 12, 10)		
8	Dense, grey, silty sandy angular GRAVEL with angular cobbles			7.80						
8	End of Borehole at 8.30 m			8.30				N = 50/160 mm (8, 15, 19, 22, 9)		

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HARD STRATA BORING/CHISELLING				WATER STRIKE DETAILS					
From (m)	To (m)	Time (h)	Comments	Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
8.1	8.3	1.5		8.20	8.20	NO	5.90	20	Rapid

INSTALLATION DETAILS					GROUNDWATER PROGRESS				
Date	Tip Depth	RZ Top	RZ Base	Type	Date	Hole Depth	Casing Depth	Depth to Water	Comments
20-09-11	8.30	2.00	8.10	50mm SP					

REMARKS	Sample Legend D - Small Disturbed (tub) B - Bulk Disturbed LB - Large Bulk Disturbed Env - Environmental Sample (Jar + Vial + Tub) U - Undisturbed 100mm Diameter Sample P - Undisturbed Piston Sample W - Water Sample
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GEOTECHNICAL BORING RECORD

REPORT NUMBER

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CONTRACT Drehid Landfill, Phase 1 (MBT Facility)			BOREHOLE NO. BH5	
CO-ORDINATES		RIG TYPE Dando 150		SHEET Sheet 1 of 1
GROUND LEVEL (m AOD)		BOREHOLE DIAMETER (mm) 200		DATE COMMENCED 14/09/2011
		BOREHOLE DEPTH (m) 8.90		DATE COMPLETED 15/09/2011
CLIENT ENGINEER Bord na Mona Tobin		SPT HAMMER REF. NO. SPT6		BORED BY M. Connolly
		ENERGY RATIO (%) 55		PROCESSED BY I.Reeder

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples				Field Test Results	Standpipe Details
					Ref. Number	Sample Type	Depth (m)	Recovery		
0	Very soft, dark brown, PEAT									
1										
2	Very soft, grey, SILT			2.30						
3										
3	Stiff, grey, sandy gravelly SILT/CLAY with many cobbles (pocket of firm grey silt at 5.0m)			2.70						
4										
5										
6										
7										
8	Dense, grey, silty sandy angular GRAVEL with angular cobbles			7.50						
9										
9	End of Borehole at 8.90 m									

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HARD STRATA BORING/CHISELLING				WATER STRIKE DETAILS					
From (m)	To (m)	Time (h)	Comments	Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
7.7	7.9	0.75		7.20	7.20	NO	5.50	20	Rapid
8.8	8.9	1.5							

INSTALLATION DETAILS					GROUNDWATER PROGRESS				
Date	Tip Depth	RZ Top	RZ Base	Type	Date	Hole Depth	Casing Depth	Depth to Water	Comments

REMARKS	Sample Legend D - Small Disturbed (tub) B - Bulk Disturbed LB - Large Bulk Disturbed Env - Environmental Sample (Jar + Vial + Tub) U - Undisturbed 100mm Diameter Sample P - Undisturbed Piston Sample W - Water Sample
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GEOTECHNICAL BORING RECORD

REPORT NUMBER

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CONTRACT Drehid Landfill, Phase 1 (MBT Facility)			BOREHOLE NO. BH7	
CO-ORDINATES		RIG TYPE Dando 150		SHEET Sheet 1 of 1
GROUND LEVEL (m AOD)		BOREHOLE DIAMETER (mm) 200		DATE COMMENCED 27/09/2011
		BOREHOLE DEPTH (m) 10.00		DATE COMPLETED 27/09/2011
CLIENT Bord na Mona		SPT HAMMER REF. NO. SPT1		BORED BY M. Connolly
ENGINEER Tobin		ENERGY RATIO (%) 51		PROCESSED BY I.Reider

Depth (m)	Description	Legend	Elevation	Depth (m)	Samples				Field Test Results	Standpipe Details			
					Ref. Number	Sample Type	Depth (m)	Recovery					
0	Very soft, dark brown, PEAT												
1										AL4892	B	1.00-1.50	N = 1 (0, 0, 0, 0, 1, 0)
2										AL4893	B	2.00-2.50	N = 1 (0, 0, 0, 1, 0, 0)
3	Soft, grey, sandy SILT with occasional gravel			3.10									
4										AL4894	B	3.00-3.50	N = 2 (0, 0, 0, 1, 0, 1)
5	Dense, grey, sandy GRAVEL			4.70									
6										AL4895	B	4.00-4.50	N = 9 (1, 2, 2, 3, 2, 2)
7	Very stiff, grey, sandy gravelly SILT/CLAY with many cobbles			5.30									
8										AL4896	B	5.00-5.50	N = 33 (5, 7, 7, 8, 8, 10)
9										AL4897	B	6.00-6.50	N = 32 (2, 4, 9, 8, 8, 7)
10	Dense, grey sandy GRAVEL with cobbles			8.60									
11										AL4898	B	7.00-7.50	N = 45 (2, 3, 6, 11, 15, 13)
12	End of Borehole at 10.00 m			10.00									
13										AL4899	B	8.00-8.50	N = 51 (6, 12, 10, 10, 14, 17)
14					AL4900	B	9.00-9.50	N = 50/155 mm (3, 8, 15, 25, 10)					

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HARD STRATA BORING/CHISELLING				WATER STRIKE DETAILS					
From (m)	To (m)	Time (h)	Comments	Water Strike	Casing Depth	Sealed At	Rise To	Time (min)	Comments
7.5	7.9	1		4.10	4.10	5.40	NO	20	Slow
9.3	9.6	1.5		9.30	9.30	NO	3.70	20	Rapid

INSTALLATION DETAILS					GROUNDWATER PROGRESS				
Date	Tip Depth	RZ Top	RZ Base	Type	Date	Hole Depth	Casing Depth	Depth to Water	Comments

REMARKS	Sample Legend D - Small Disturbed (tub) B - Bulk Disturbed LB - Large Bulk Disturbed Env - Environmental Sample (Jar + Vial + Tub) U - Undisturbed 100mm Diameter Sample P - Undisturbed Piston Sample W - Water Sample
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TRIAL PIT RECORD

REPORT NUMBER

15466

CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP22
LOGGED BY I.Reeder	CO-ORDINATES	SHEET Sheet 1 of 1
		DATE STARTED 03/10/2011
CLIENT ENGINEER Bord na Mona Tobin	GROUND LEVEL (m)	DATE COMPLETED 03/10/2011
		EXCAVATION METHOD 8T Track machine

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL		0.10							
	Soft, dark brown, slightly fibrous PEAT with many tree roots		0.40							
	Soft to firm, brown, slightly sandy gravelly SILT/CLAY with occasional cobbles									
1.0										
2.0	Soft, grey, sandy gravelly SILT/CLAY with some cobbles		1.90		↓ (Seepage)	O7692 O7692	B D	1.50-1.50 1.50-1.50		
3.0					↓ (Seepage)	O7693 O7693	B D	3.00-3.00 3.00-3.00		
3.50	End of Trial Pit at 3.50m		3.50							
4.0										

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Groundwater Conditions
Seepage at 2.0m and 3.0m

Stability
TP slightly unstable from 1.9m

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

15466

CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP23
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 04/10/2011 DATE COMPLETED 04/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown, fibrous PEAT with some timber pieces		0.10							
	Firm to stiff, brown/grey mottled, slightly sandy gravelly SILT/CLAY with occasional cobbles		0.60							
1.0	Soft, grey, sandy gravelly SILT/CLAY with many cobbles		1.20		↓ (Seepage)	O7698 O7698	B D	1.20-1.20 1.20-1.20		
2.0	Firm to stiff, grey, slightly sandy gravelly SILT/CLAY with many cobbles and occasional boulders		2.50			O7699 O7699	B D	2.70-2.70 2.70-2.70		
3.0	End of Trial Pit at 3.50m		3.50		↓ (Seepage)					

Groundwater Conditions
Seepage at 1.0m and 3.5m

Stability
TP unstable from 1.2m to 2.5m

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

15466

CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP24
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 04/10/2011 DATE COMPLETED 04/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown, fibrous PEAT		0.05							
	Soft, grey, sandy gravelly SILT/CLAY with some cobbles		0.60							
1.0	Very soft, grey, sandy very gravelly SILT/CLAY with many cobbles		1.60		↓ (Slow)	O7696	B	1.50-1.50		
2.0						O7696	D	1.50-1.50		
3.0	Firm, grey, sandy gravelly SILT/CLAY		3.00			O7697	B	3.00-3.00		
	End of Trial Pit at 3.50m		3.50		↓ (Slow)	O7697	D	3.00-3.00		
4.0										

Groundwater Conditions
Slow water flow at 1.6m and 2.5m

Stability
TP very unstable from 1.6m

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

15466

CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP25
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 03/10/2011 DATE COMPLETED 03/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown, fibrous PEAT with tree roots		0.10							
1.0	Soft to firm, brown/grey mottled, sandy SILT with some gravel and organic pieces		0.90		↓ (Seepage)				38 14[R]	
1.30	Soft to firm, grey, sandy gravelly SILT/CLAY with occasional cobbles		1.30			O7694	B	1.50-1.50		
2.0	Very soft to soft, grey, sandy very gravelly SILT/CLAY with some cobbles		2.00		↓ (Seepage)	O7694	D	1.50-1.50		
2.70	Firm, grey, sandy gravelly SILT/CLAY		2.70							
3.0	Obstruction - TP collapsed End of Trial Pit at 3.00m		3.00			O7695	B	3.00-3.00		
						O7695	D	3.00-3.00		

Groundwater Conditions
Seepage at 0.9m and 2.0m

Stability
TP very unstable from 1.0m - collapsed

General Remarks
Obstruction at 3.0m due to TP instability

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TRIAL PIT RECORD

REPORT NUMBER

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CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP26
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 04/10/2011 DATE COMPLETED 04/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown, slightly fibrous PEAT with many tree roots and timber pieces		0.10							
	Soft, greym sandy gravelly SILT/CLAY with many cobbles		0.60		↓ (Seepage)					
1.0										
2.0										
	Soft to firm, grey, sandy gravelly SILT/CLAY with some cobbles and occasional boulders		2.60			AK5503 AK5503	B D	1.40-1.40 1.40-1.40		
3.0										
	End of Trial Pit at 3.50m		3.50			AK5504 AK5504	B D	3.20-3.20 3.20-3.20		
4.0										

Groundwater Conditions
Seepage at 0.6m

Stability
TP unstable from 0.6m to 2.6m

General Remarks

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TRIAL PIT RECORD

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CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP27
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 04/10/2011 DATE COMPLETED 04/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL		0.10							
	Soft, dark brown, fibrous PEAT with tree roots and timber pieces									
	Soft, greyish brown, sandy slightly gravelly SILT/CLAY with some organic pieces		0.60							
	Soft, grey, slightly sandy gravelly SILT/CLAY with some cobbles		0.90							
1.0										
					↓ (Seepage)	AK5501	B	1.50-1.50		
						AK5501	D	1.50-1.50		
2.0										
	Firm, grey, sandy gravelly SILT/CLAY		2.70							
3.0						AK5502	B	3.00-3.00		
						AK5502	D	3.00-3.00		
3.50	End of Trial Pit at 3.50m		3.50							
4.0										

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Groundwater Conditions
Seepage at 1.5m

Stability
TP unstable from 1.0m to 2.7m

General Remarks

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TRIAL PIT RECORD

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15466

CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP28
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 04/10/2011 DATE COMPLETED 04/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown, fibrous PEAT with tree roots		0.10							
1.0	Soft, grey, sandy gravelly SILT/CLAY with many cobbles		1.10						34 13[R]	
2.0						AK5513 AK5513	B D	1.60-1.60 1.60-1.60		
2.5	Very soft, grey, sandy very gravelly SILT/CLAY with many cobbles and boulders (possible very clayey sandy gravel with cobbles and boulders)		2.50		↓ (Moderate)					
3.0						AK5514 AK5514	B D	2.90-2.90 2.90-2.90		
3.5	End of Trial Pit at 3.50m		3.50							
4.0										

Groundwater Conditions
Moderate water flow at 2.5m

Stability
TP very unstable from 2.0m

General Remarks

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CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP29
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 03/10/2011 DATE COMPLETED 03/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown/ black, slightly fibrous PEAT		0.05							
	Firm to stiff, brown/grey mottled, slightly sandy slightly gravelly SILT/CLAY with some cobbles and organic pieces		0.40							
1.0	Soft, grey, sandy very gravelly SILT/CLAY with many cobbles		1.10			O7690 O7690	B D	1.00-1.00 1.00-1.00		
2.0	Stiff, grey, slightly sandy gravelly SILT/CLAY with many cobbles and occasional boulders		2.00		↓ (Moderate)					
						O7691 O7691	B D	2.50-2.50 2.50-2.50		
3.0										
	End of Trial Pit at 3.50m		3.50							
4.0										

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Groundwater Conditions
Moderate water flow at 2.0m

Stability
TP very unstable from 1.1m to 2.0m

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

15466

CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP30
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 04/10/2011 DATE COMPLETED 04/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown, slightly fibrous PEAT with tree roots		0.10							
	Soft, grey, sandy gravelly SILT/CLAY with many cobbles and boulders		0.60							
1.0										
2.0										
	Firm, grey, sandy gravelly SILT/CLAY with some cobbles		3.00			AK5505 AK5505	B D	1.50-1.50 1.50-1.50		
3.0										
	End of Trial Pit at 3.50m		3.50			AK5506 AK5506	B D	3.30-3.30 3.30-3.30		
4.0										

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↓
(See page)

Groundwater Conditions
Seepage at 2.5m

Stability
TP unstable from 1.0m

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

15466

CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP31
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 04/10/2011 DATE COMPLETED 04/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Soft, dark brown, fibrous PEAT with timber pieces	▽▽								
1.0		▽▽								
1.40	Soft to firm, grey, sandy gravelly SILT/CLAY with some cobbles	▽▽	1.40		↓ (Rapid)	AK5511 AK5511	B D	1.50-1.50 1.50-1.50		40 13[R]
2.0		▽▽								
2.50	Medium dense, grey, silty sandy fine to coarse GRAVEL	▽▽	2.50							
3.0		▽▽								
3.00	Soft, grey, sandy gravelly SILT/CLAY with cobbles	▽▽	3.00			AK5512 AK5512	B D	2.80-2.80 2.80-2.80		
3.50	End of Trial Pit at 3.50m	▽▽	3.50							
4.0		▽▽								

Groundwater Conditions
Rapid water flow at 1.4m

Stability
TP very unstable from 2.0m

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

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CONTRACT Drehid Landfill, Phase 1 (MBT Facility)

TRIAL PIT NO. **TP32**

SHEET Sheet 1 of 1

LOGGED BY I.Reeder

CO-ORDINATES

DATE STARTED 30/09/2011

DATE COMPLETED 30/09/2011

CLIENT ENGINEER Bord na Mona
Tobin

GROUND LEVEL (m)

EXCAVATION METHOD 8T Track machine

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown, fibrous PEAT		0.10							
1.0	Soft, grey, sandy SILT with occasional gravel		0.85		↓ (Moderate)	O7678 O7678	B D	1.00-1.00 1.00-1.00		
2.0	Soft, grey, sandy gravelly SILT/CLAY with occasional cobbles and boulders		1.30							
3.0						O7679 O7679	B D	3.00-3.00 3.00-3.00		
4.0	End of Trial Pit at 3.50m		3.50							

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Groundwater Conditions
Moderate water flow at 0.85m

Stability
TP unstable from 0.85m

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

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CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP33
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 04/10/2011 DATE COMPLETED 04/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown, slightly fibrous PEAT with many tree roots		0.10							
1.0	Soft, grey, sandy gravelly SILT/CLAY with some cobbles		0.80		↓ (Seepage)					
2.0						AK5509 AK5509	B D	1.60-1.60 1.60-1.60		
3.0	Firm to stiff, grey, slightly sandy slightly gravelly SILT/CLAY with many cobbles and occasional boulders		2.50							
3.5						AK5510 AK5510	B D	3.00-3.00 3.00-3.00		
4.0	End of Trial Pit at 3.50m		3.50							

Groundwater Conditions
Seepage at 0.8m

Stability
TP unstable from 1.0m to 2.5m

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

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CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP34
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 04/10/2011 DATE COMPLETED 04/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Very soft, dark brown, fibrous PEAT with many timber pieces		0.10							
1.0					 1 (Rapid)					
1.50	Soft to firm, grey, sandy gravelly SILT/CLAY with many cobbles and occasional boulders		1.50		 2 (Moderate)	AK5515 AK5515	B D	1.70-1.70 1.70-1.70		20 10[R]
2.0										
3.0										
3.50	End of Trial Pit at 3.50m		3.50			AK5516 AK5516	B D	3.50-3.50 3.50-3.50		
4.0										

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Groundwater Conditions
Rapid water flow at 1.0m; Moderate water flow at 1.5m

Stability
TP slightly unstable

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

15466

CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP35
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 30/09/2011 DATE COMPLETED 30/09/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown, fibrous PEAT with some timber pieces		0.10		1 ↓ (Moderate)					
1.0										
1.70	Firm, grey, sandy gravelly SILT/CLAY with occasional cobbles		1.70		2 ↓ (Moderate)	O7680 O7680	B D	2.00-2.00 2.00-2.00		42 20[R]
2.0										
2.40	Very soft to soft, grey, sandy very gravelly SILT/CLAY with some cobbles (possible very clayey sandy gravel with cobbles)		2.40							
3.0										
3.50	End of Trial Pit at 3.50m		3.50			O7681 O7681	B D	3.50-3.50 3.50-3.50		
4.0										

Groundwater Conditions
Moderate water flow at 0.8m and 1.7m

Stability
TP very unstable - collapsed

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

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CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP36
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 04/10/2011 DATE COMPLETED 04/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Very soft, dark brown, fibrous PEAT with tree roots		0.05							
1.0	Soft, grey, sandy gravelly SILT/CLAY with occasional cobbles and lenses of grey sandy gravel at 1.7m		1.00						24 12[R]	
2.0	Soft, grey, sandy gravelly SILT/CLAY with many cobbles		2.20		↓ (Moderate)	AK5507 AK5507	B D	1.50-1.50 1.50-1.50		
3.0	Firm, grey, sandy gravelly SILT/CLAY		3.00			AK5508 AK5508	B D	3.00-3.00 3.00-3.00		
4.0	End of Trial Pit at 3.50m		3.50							

Groundwater Conditions
Moderate water flow at 1.7m

Stability
TP slightly unstable from 1.5m

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

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CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP37
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 04/10/2011 DATE COMPLETED 04/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown, fibrous PEAT with some timber pieces		0.10							
1.0										
1.30	Soft to firm, grey, slightly sandy gravelly SILT/CLAY with some cobbles		1.30		↓ (Moderate)				40 18[R]	
2.0						AK5517 AK5517	B D	1.50-1.50 1.50-1.50		
2.10	Soft, grey, sandy gravelly SILT/CLAY with many cobbles and occasional boulders		2.10							
3.0										
3.00	Firm, grey, slightly sandy gravelly SILT/CLAY with some cobbles		3.00							
3.50						AK5518 AK5518	B D	3.20-3.20 3.20-3.20		
3.50	End of Trial Pit at 3.50m		3.50							
4.0										

Groundwater Conditions
Moderate water flow at 1.3m

Stability
TP unstable from 2.0m

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

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CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP38
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 30/09/2011 DATE COMPLETED 30/09/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown, fibrous PEAT with some timber pieces		0.05							
1.0					 (Slow)				38 18[R]	
2.0	Soft to firm, grey, sandy gravelly SILT/CLAY with occasional cobbles		1.70		 (Moderate)	O7682 O7682	B D	1.70-1.70 1.70-1.70		
3.0	Soft, grey, sandy very gravelly SILT/CLAY with many cobbles		2.30							
3.5	End of Trial Pit at 3.50m		3.50			O7683 O7683	B D	3.00-3.00 3.00-3.00		

Groundwater Conditions
Slow water flow at 1.0m; Moderate water flow at 1.7m

Stability
TP very unstable from 1.7m

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

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CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP39
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 03/10/2011 DATE COMPLETED 03/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown, fibrous PEAT with occasional timber pieces		0.10							
1.60	Soft to firm, grey, sandy gravelly SILT/CLAY with some cobbles and occasional boulders		1.60			O7688 O7688	B D	1.50-1.50 1.50-1.50		34 12[R]
3.00	End of Trial Pit at 3.50m		3.50		↓ (Seepage)	O7689 O7689	B D	3.00-3.00 3.00-3.00		

Groundwater Conditions
Seepage at 2.5m

Stability
TP very unstable from 1.6 - collapsed

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

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CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP40
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 04/10/2011 DATE COMPLETED 04/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Very soft, dark brown, fibrous PEAT with some timber pieces		0.05							
1.0	Soft to firm, grey, slightly sandy gravelly SILT/CLAY with some cobbles and occasional boulders		1.20		↓ (Slow)	AK5519	B	1.40-1.40	21 12[R]	
				AK5519		D	1.40-1.40			
2.0	End of Trial Pit at 3.50m		3.0			AK5520	B	2.80-2.80		
				AK5520	D	2.80-2.80				
4.0			3.50							

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Groundwater Conditions
Slow water flow at 1.2m

Stability
TP unstable from 1.5m

General Remarks

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TRIAL PIT RECORD

REPORT NUMBER

15466

CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP41
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 03/10/2011 DATE COMPLETED 03/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown, fibrous PEAT with some timber pieces		0.05							
1.0	Soft to firm, grey, sandy gravelly SILT/CLAY with occasional cobbles		1.10		↓ (Seepage)	O7684 O7684	B D	1.20-1.20 1.20-1.20	37 13[R]	
2.0	Medium dense, grey, slightly silty sandy fine to coarse GRAVEL		2.30		↓ (Rapid)	O7685 O7685	B D	2.50-2.50 2.50-2.50		
3.0	Firm, grey, sandy gravelly SILT/CLAY		2.70							
4.0	Obstruction - rapid water flow and TP instability End of Trial Pit at 3.20m		3.20							

Groundwater Conditions
Seepage at 1.1m; Rapid water flow at 2.3m

Stability
TP very unstable from 1.1 - collapsed

General Remarks
Obstruction at 3.2m due to rapid water flow and TP instability

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TRIAL PIT RECORD

REPORT NUMBER

15466

CONTRACT Drehid Landfill, Phase 1 (MBT Facility)		TRIAL PIT NO. TP42
LOGGED BY I.Reeder		SHEET Sheet 1 of 1
CLIENT ENGINEER Bord na Mona Tobin		DATE STARTED 03/10/2011 DATE COMPLETED 03/10/2011
CO-ORDINATES		EXCAVATION METHOD 8T Track machine
GROUND LEVEL (m)		

Depth (m)	Geotechnical Description	Legend	Depth (m)	Elevation	Water Strike	Samples			Vane Test (KPa)	Hand Penetrometer (KPa)
						Sample Ref	Type	Depth		
0.0	Peaty TOPSOIL Soft, dark brown/black, slightly fibrous PEAT		0.10							
1.0	Soft, brown, slightly sandy SILT with some organic pieces		0.80							
1.10	Soft, grey, sandy very gravelly SILT/CLAY with some cobbles		1.10							
2.0					 (Slow)	O7686	B	1.30-1.30		
					 (Moderate)	O7686	D	1.30-1.30		
3.0						O7687	B	2.80-2.80		
						O7687	D	2.80-2.80		
3.50	End of Trial Pit at 3.50m		3.50							

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Groundwater Conditions
Slow water flow at 2.0m; Moderate water flow at 2.5m

Stability
TP very unstable from 1.1

General Remarks

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