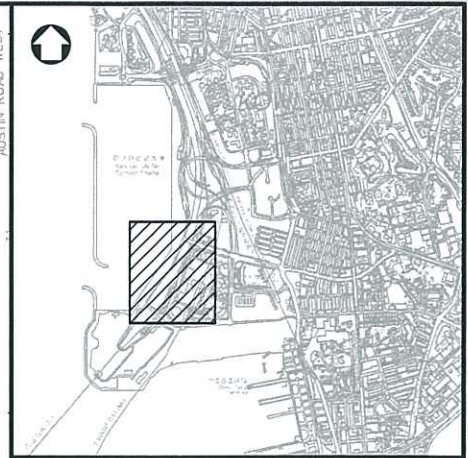
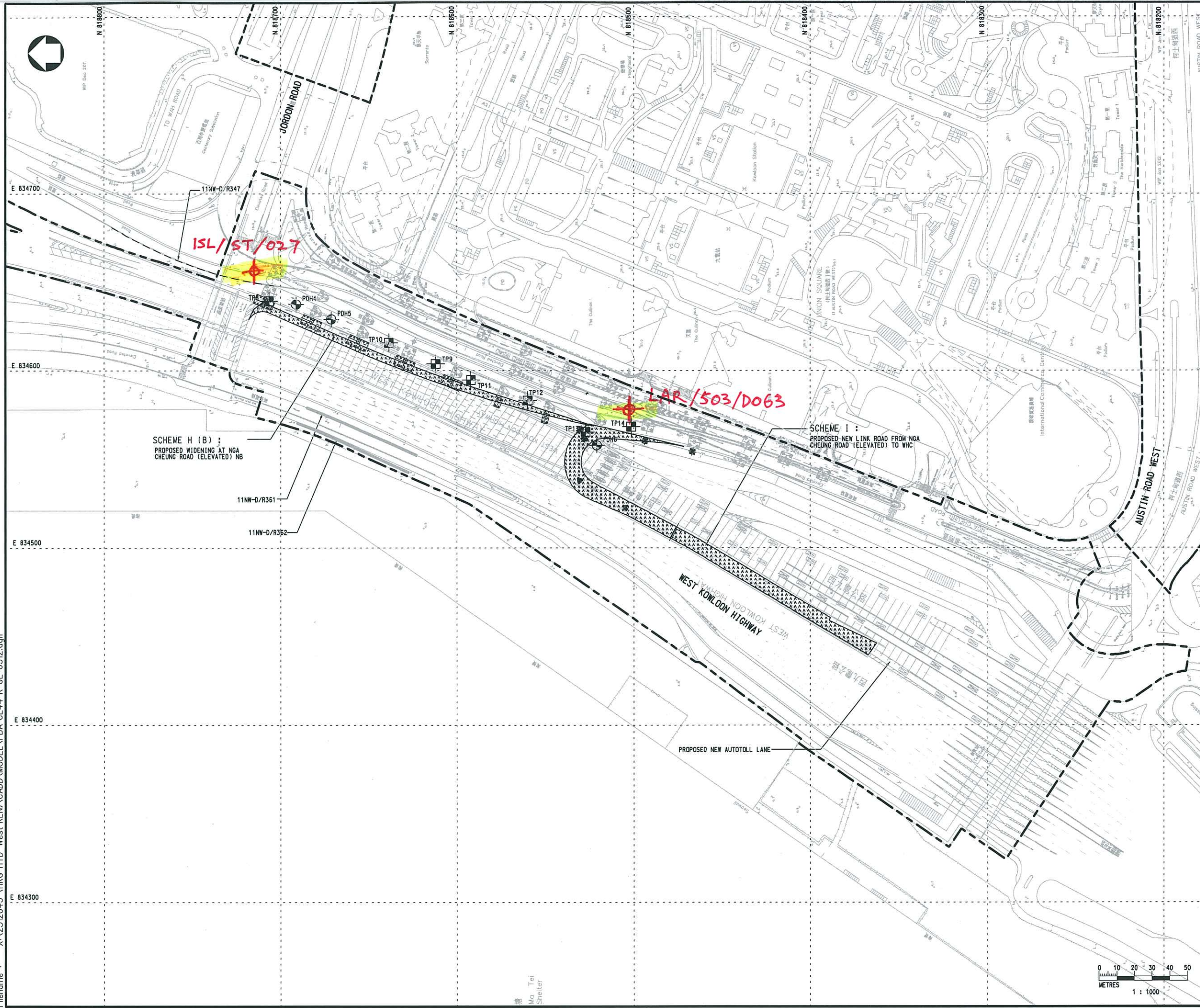


Appendix 6.4B

Existing Ground Investigation Records (Extracts)

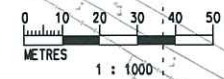


LOCATION PLAN


LEGEND :

- EXISTING DRILLHOLE
- PROPOSED DRILLHOLE
- PROPOSED TRIAL PIT / TRIAL TRENCH
- XRL SITE BOUNDARY LINE
- FEATURE BOUNDARY

Rev	Description	By	Date
Consultant PARSONS BRINCKERHOFF			
Project title AGREEMENT NO. CE 44/2011 (HY) PROPOSED ROAD IMPROVEMENT WORKS IN WEST KOWLOON RECLAMATION DEVELOPMENT - PHASE 1 INVESTIGATION, DESIGN AND CONSTRUCTION			
Drawing title GROUND INVESTIGATION AND FEATURE LOCATION PLAN (SHEET 2 OF 3)			
Drawing no. CE44/K/GE/0312		Rev. -	
Drawn CAD	Date	Checked	Approved
Scale 1:1000 (A1)	Status PRELIMINARY DESIGN		
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路政署 HIGHWAYS DEPARTMENT 主要工程管理處 MAJOR WORKS PROJECT MANAGEMENT OFFICE			



DRILLHOLE RECORD		JOB NO. <u>WK14</u>
		HOLE NO. <u>BH1A</u>
		SHEET <u>1</u> of <u>6</u>
		DATE from <u>13.4.91</u> to <u>20.4.91</u>
PROJECT <u>West Kowloon Reclamation, Site Investigation</u> <u>Yau Ma Tei Seawall</u>		
METHOD <u>Rotary</u>	CO-ORDINATES	ROCK COREBIT <u>T2, TNW</u>
MACHINE & No. <u>Diamant Boart D7</u>	E <u>834614.33</u> N <u>819530.19</u>	HOLE DIA. <u>P to H to N</u> <u>140mm to 114mm to 89mm</u>
FLUSHING MEDIUM <u>Water</u>	ORIENTATION <u>VERTICAL</u>	GROUND-LEVEL <u>5.37 mPD</u>


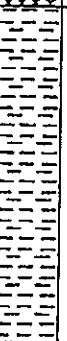

Drilling Progress	Casing depth/size	Water level/time/date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description		
13/4	P		80	100	100	80	1		P	+4.77	0.50				Cement concrete (FILL)		
				55	65	15	6				0.75						
											1.00						
				52	52	9	6				1.65						
											2.00						
											2.80						
				79	78	73	3				3.00						
											4.00						
13/4 15/4											4.20						
				77	68	46	3				5.00					BOULDER and COBBLE sized fragment of slightly decomposed hardrock (FILL)	
											5.50						
	6.30 P H			63	63	50	2				6.00						
											6.30						
				60	57	57	1				7.00						
											7.80						
											8.00						
				65	63	63	1				9.00						
											9.30						
15/4	H		80	43	43	39	3			-4.53	10.00						

</

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- Telex: 61840 LGEOL HX • Fax: 8340657 • Tels: 8910563, 5734365

DRILLHOLE RECORD		JOB NO. <u>WK14</u>
		HOLE NO. <u>BH1A</u>
		SHEET <u>2</u> of <u>6</u>
		DATE from <u>13.4.91</u> to <u>20.4.91</u>
PROJECT <u>West Kowloon Reclamation, Site Investigation</u> <u>Yau Ma Tei Seawall</u>		
METHOD <u>Rotary</u>	CO-ORDINATES	ROCK COREBIT <u>T2, TNW</u>
MACHINE & No. <u>Diamant Bort</u> <u>D7</u>	E <u>834614.33</u> N <u>819530.19</u>	HOLE DIA. <u>P to H to N</u> <u>140mm to 114mm to 89mm</u>
FLUSHING MEDIUM <u>Water</u>	ORIENTATION <u>VERTICAL</u>	GROUND-LEVEL <u>5.37 mPD</u>

Drilling Progress	Casing depth/size	Water level/time/date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
15/4	H		80	43	43	39	3				10.30				BOULDER and COBBLE sized fragment of slightly decomposed hardrock (FILL)
				40	0	0	5				11.00				
15/4											11.80				
16/4				56	56	56	1				12.00				
								T2			12.50				
				78	34	17	N.I.				13.00				
											13.40				
				54	36	36	N.I.				14.00				
											14.60				
				38	0	0	N.I.			-9.63	15.00				Soft to firm, greenish grey, CLAY with some shell fragment (MARINE DEPOSIT)
											16.00				
				100				22 bls	1		17.00				
											18.00				Medium dense, light greyish yellow, fine to coarse SAND with some shell fragment (MARINE DEPOSIT)
				100				43 bls	2	-12.63	18.00				
											19.00				
16/4	H		80					(1,1) (22,33) N=10	3	-14.63	20.00				

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DRILLHOLE RECORD		JOB NO. <u>WK14</u>	
		HOLE NO. <u>BH1A</u>	
		SHEET <u>3</u> of <u>6</u>	
		DATE from <u>13.4.91</u> to <u>20.4.91</u>	
PROJECT <u>West Kowloon Reclamation, Site Investigation</u> <u>You Ma Tei Seawall</u>			
METHOD <u>Rotary</u>		CO-ORDINATES	
MACHINE & No. <u>Diamant Boart</u> <u>D7</u>		E <u>834614.33</u> N <u>819530.19</u>	
FLUSHING MEDIUM <u>Water</u>		ORIENTATION <u>VERTICAL</u>	
		ROCK COREBIT <u>T2, TNW</u>	
		HOLE DIA. <u>P to H to N</u> <u>140mm to 114mm to 89mm</u>	
		GROUND-LEVEL <u>5.37 mPD</u>	

Drilling Progress	Casing depth/size	Water level/ time/ date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
16/4	H		80												See sheet 2 of 6
16/4				90						15.63	21.00				Firm to stiff, light yellowish brown, sandy CLAY with fine gravel
17/4										16.63	22.00				(ALLUVIUM) SCL
								(34 55,15) N=19		17.63	23.00		V		Extremely weak, greenish green, completely decomposed fine grained GRANITE (Medium dense, clayey SILT with fine gravel)
				95							24.00				
								(34 55,7,13) N=30			25.00		V		Extremely weak, pink, Completely decomposed medium grained GRANITE (Medium dense, silty fine SAND)
											26.00				
				70							27.00				
										22.63	28.00				
								(23 55,8,12) N=30			29.00		V		Extremely weak, pink, Completely decomposed coarse grained GRANITE (Dense to very dense, fine to coarse SAND)
17/4	H		80							24.63	30.00				

• Small disturbed sample ▲ Water sample
 • Large disturbed sample x Water level
 • SPT liner sample ↓ Standard penetration test
 • U76 undisturbed sample ↓ Permeability test
 • U100 undisturbed sample ↓ Piezometer tip
 • Master sample ✓ In-situ vane shear test
 • P/S Pluton sample

LOGGED T.P. Wong

DATE 22.4.91

CHECKED H.W. Chan

DATE 30.4.91

REMARKS

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DRILLHOLE RECORD		JOB NO. <u>WK14</u>
		HOLE NO. <u>BH1A</u>
		SHEET <u>4</u> of <u>6</u>
		DATE from <u>13.4.91</u> to <u>20.4.91</u>
PROJECT <u>West Kowloon Reclamation, Site Investigation</u> <u>Yau Ma Tei Seawall</u>		
METHOD <u>Rotary</u>	CO-ORDINATES	ROCK COREBIT <u>T2, TNW</u>
MACHINE & No. <u>Diamant Bort D7</u>	E <u>834614.33</u> N <u>819530.19</u>	HOLE DIA. <u>P to H to N</u> <u>140mm to 114mm to 89mm</u>
FLUSHING MEDIUM <u>Water</u>	ORIENTATION <u>VERTICAL</u>	GROUND-LEVEL <u>5.37 mPD</u>

Drilling Progress	Casing depth/size	Water level/time/date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
17/4	H		80	90					10		31.00				
								(4.6) A, (10, 14, 18) N=50	11		32.00				
				90					12		34.00				
17/4 18/4								(7.8) A, (10, 11, 14, 18) N=53	13		35.00		V		Extremely weak, pink, Completely decomposed coarse grained GRANITE (Dense to very dense, fine to coarse SAND)
				95					14		37.00				
								(12.27) A, (14.5, 17) N=216	15		38.00				
				90							39.00				
18/4	H		80						16	34.63	40.00				

• Small disturbed sample ▲ Water sample
 • Large disturbed sample x Water level
 • SPT liner sample ↓ Standard penetration test
 • U76 undisturbed sample ⊥ Permeability test
 • U100 undisturbed sample ⊥ Piezometer tip
 • Moler sample ✓ In-situ vane shear test
 P/S Platon sample

LOGGED T.P. Wong

DATE 22.4.91

CHECKED H.W. Chan

DATE 30.4.91

REMARKS

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DRILLHOLE RECORD		JOB NO. <u>WK14</u>
		HOLE NO. <u>BH1A</u>
		SHEET <u>5</u> of <u>6</u>
		DATE from <u>13.4.91</u> to <u>20.4.91</u>
PROJECT <u>West Kowloon Reclamation, Site Investigation</u> <u>Yau Ma Tei Seawall</u>		
METHOD <u>Rotary</u>	CO-ORDINATES <u>E 834614.33</u> <u>N 819530.19</u>	ROCK COREBIT <u>T2, TNW</u>
MACHINE & No. <u>Diamant Boart D7</u>		HOLE DIA. <u>P to H to N</u> <u>140mm to 114mm to 89mm</u>
FLUSHING MEDIUM <u>Water</u>	ORIENTATION <u>VERTICAL</u>	GROUND-LEVEL <u>5.37 mPD</u>

Drilling Progress	Casing depth/size	Water level/time/date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
18/4	H		80								41.00				
				90							42.00				
18/4 19/4											43.00				
											44.00				
				95							45.00				
19/4 20/4	48.00 H N										46.00				
											47.00				
											48.00				
											49.00				
	49.50 N										49.50				
20/4			80	100	100	90	4				50.00				
											50.00				

• Small disturbed sample ▲ Water sample
 • Large disturbed sample ✕ Water level
 • SPT liner sample ↓ Standard penetration test
 • U78 undisturbed sample ⊥ Permeability test
 • U100 undisturbed sample ⊥ Piezometer tip
 • Maxier sample ✓ In-situ vane shear test
 P/S Piston sample

LOGGED T.P. Wong
 DATE 22.4.91
 CHECKED H.W. Chan
 DATE 30.4.91

REMARKS

Extremely weak, pink, Completely decomposed coarse grained GRANITE (Dense to very dense, fine to coarse SAND)

See sheet 6 of 6

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DRILLHOLE RECORD		JOB NO. <u>WK14</u>	
		HOLE NO. <u>BH1A</u>	
		SHEET <u>6</u> of <u>6</u>	
		DATE from <u>13.4.91</u> to <u>20.4.91</u>	
PROJECT <u>West Kowloon Reclamation, Site Investigation</u> <u>You Ma Tei Seawall</u>			
METHOD <u>Rotary</u>		CO-ORDINATES	
MACHINE & No. <u>Diamant Boart D7</u>		E <u>834614.33</u> N <u>819530.19</u>	
FLUSHING MEDIUM <u>Water</u>		ORIENTATION <u>VERTICAL</u>	
		ROCK COREBIT <u>T2, TNW</u>	
		HOLE DIA. <u>P to H to N</u> <u>140mm to 114mm to 89mm</u>	
		GROUND-LEVEL <u>5.37 mPD</u>	

Drilling Progress	Casing depth/size	Water level/time/date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
20/4			80	100	100	90	4	TNW			50.55	+	II		Strong, light pinkish green with dark green speckles, slightly decomposed coarse grained GRANITE medium spaced joint with Ilmonite stained dip 10°-25° and 45°
			100	100	100	0	51.00				+				
			100	100	100	2	51.35				+				
			100	100	100		52.00				+				
			100	100	93	3	52.30				+				
							53.00				+				
							53.45				+				
			100	100	100	3	54.00				+				
											+				
											+				
20/4			80							-49.58	54.95	+			TD
											55.00				End of investigation hole at 54.95m
											57.00				
											58.00				
											59.00				
											60.00				

Small disturbed sample

Large disturbed sample

SPT liner sample

U76 undisturbed sample

U100 undisturbed sample

Mazier sample

P/S Pilon sample

Water sample

Water level

Standard penetration test

Permeability test

Piezometer tip

In-situ vane shear test

LOGGED T.P. Wong

DATE 22.4.91

CHECKED H.W. Chan

DATE 30.4.91

REMARKS

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**BACHY
SOLETANCHE**BACHY SOLETANCHE GROUP
SOIL & FOUNDATIONS SPECIALISTS**DRILLHOLE RECORD**W. O. PW7/2/33.105/S1
HOLE NO. ISL/ST/027
SHEET 1 of 5
DATE from 9/1/93 to 15/1/93
CONTRACT GC/91/05 OF C.E.D.PROJECT WEST KOWLOON EXPRESSWAY LAND SITE INVESTIGATION
(ADDITIONAL HOLES IN JORDAN AREA)

METHOD ROTARY

CO-ORDINATES

ROCK CORE BIT T2-101

MACHINE & No. CMC-40

E 834656.07
N 818712.02HOLE DIA. 0.00m-11.00m SX
11.00m-36.00m PX
36.00m-44.50m HX

FLUSHING MEDIUM WATER

ORIENTATION VERTICAL

GROUND-LEVEL 8.29 mPD

Drilling Progress	Casing depth/ size	Water level/ time/ date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
1	SX			41							1.50				Angular to subangular COBBLES with occasional boulder. Boulder at : 2.65m-3.00m. (FILL)
2		9/1/93		60											
3								(24 3.6,5.7) N=24	1	+5.29	3.00				
4									2		3.45				
5											4.00				
6											4.10				
7								(35 4.6,7.7) N=24	3		5.00				
8		11/1/93							4		5.45				
9									5		6.00				
10	SX								6		6.10				
											7.00				
								(24 5.6,5.8) N=24	5		7.45				Medium dense, yellow, fine to medium SAND with occasional shell fragments. (FILL)
									6		8.00				
											8.10				
											9.00				
								(35 6.7,6.8) N=27	7		9.45				
											10.00				
										-1.71					

- SMALL DISTURBED SAMPLE
- LARGE DISTURBED SAMPLE
- SPT LINER SAMPLE
- U76 UNDISTURBED SAMPLE
- U100 UNDISTURBED SAMPLE
- MAZIER SAMPLE (76mm)
- PISTON SAMPLE
- WATER SAMPLE
- PIEZOMETER TIP
- STANDPIPE
- STANDARD PENETRATION TEST
- PERMEABILITY TEST
- IN-SITU VANE SHEAR TEST

LOGGED H.C. Yeung

DATE 19/1/93

CHECKED D. Yuen

DATE 20/3/93

REMARKS

BACHY SOLETANCHEBACHY SOLETANCHE GROUP
SOIL & FOUNDATIONS SPECIALISTS

DRILLHOLE RECORD

W. O. PW7/2/33.105/S1

HOLE NO. ISL/ST/027

SHEET 2 of 5

DATE from 9/1/93 to 15/1/93

PROJECT WEST KOWLOON EXPRESSWAY LAND SITE INVESTIGATION
(ADDITIONAL HOLES IN JORDAN AREA)

METHOD ROTARY

MACHINE & No. CMC-40

CO-ORDINATES

E 834656.07

N 818712.02

ROCK COREBIT T2-101

HOLE DIA. 0.00m-11.00m SX
11.00m-36.00m PX
36.00m-44.50m HX

FLUSHING MEDIUM WATER

ORIENTATION VERTICAL

GROUND-LEVEL 8.29 mPD

Drilling Progress	Casing depth/size	Water level/time/date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
11	SX								8		10.10				
	11.00m SX										11.00				
	PX							(22 3,3,4) N=14	9		11.45				
12									10		12.00				
											12.10				
13								(23 4,3,3,4) N=14	11		13.00				
											13.45				
14									12		14.00				
											14.10				
15								(33 3,4,4,3) N=14	13		15.00				
											15.45				
16									14		16.00				
											16.10				
17								(22 3,2,3,5) N=13	15		17.00				
											17.45				
18									16		18.00				
											18.10				
19								(34 6,4,5,7) N=22	17		19.00				
											19.45				
20	PX										20.00				

Medium dense, greyish yellow to yellowish grey fine to medium SAND with occasional shell fragments.

(FILL)

Medium dense, yellowish grey, sandy CLAY with occasional shell fragments.

(DISTURBED MARINE DEPOSIT)

Medium dense, yellowish grey fine SAND with occasional shell fragments.

(DISTURBED MARINE DEPOSIT)

- SMALL DISTURBED SAMPLE
- LARGE DISTURBED SAMPLE
- SPT LINER SAMPLE
- U76 UNDISTURBED SAMPLE
- U100 UNDISTURBED SAMPLE
- MAZIER SAMPLE (76mm)
- PISTON SAMPLE
- WATER SAMPLE
- PIEZOMETER TIP
- STANDPIPE
- STANDARD PENETRATION TEST
- PERMEABILITY TEST
- IN-SITU VANE SHEAR TEST

LOGGED H.C. Yeung

DATE 19/1/93

CHECKED D. Yuen

DATE 20/3/93

REMARKS



BACHY SOLETANCHE GROUP
SOIL & FOUNDATIONS SPECIALISTS

DRILLHOLE RECORD

W. O. PW7/2/33.105/S1
HOLE NO. ISL/ST/027
SHEET 3 of 5
DATE from 9/1/93 to 15/1/93

CONTRACT GC/91/05 OF C.E.D.

PROJECT WEST KOWLOON EXPRESSWAY LAND SITE INVESTIGATION
(ADDITIONAL HOLES IN JORDAN AREA)

METHOD ROTARY

CO-ORDINATES

ROCK CORE BIT T2-101

MACHINE & No. CMC-40

E 834656.07

N 818712.02

HOLE DIA. 0.00m-11.00m SX
11.00m-36.00m PX
36.00m-44.50m HX

FLUSHING MEDIUM WATER

ORIENTATION VERTICAL

GROUND-LEVEL 8.29 mPD

Drilling Progress	Casing depth/size	Water level/time/date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
21 11/1/93	PX							(33 54.45) N=18	18		20.10				
22		4.80m at 19:30							19		21.00				
		8.00m at 07:30							20		21.45				
23								(33 55.78) N=25	21		22.00				
									22		22.10				
24									22	15.71	23.00				
									23		23.45				
25								(46 78.914) N=38	23		24.00				Medium dense, grey, fine SAND with occasional fine shell fragments. (DISTURBED MARINE DEPOSIT)
									24		24.10				
26									24		25.00				
									25		25.45				
27								(24 4.588) N=23	25		26.00				
									26		26.10				
28									26		27.00				
									27		27.45				
29								(23 34.45) N=18	27		28.00				
									28		28.10				
30	PX								28		29.00				
									29		29.45				
									30		30.00				

- SMALL DISTURBED SAMPLE
- LARGE DISTURBED SAMPLE
- SPT LINER SAMPLE
- U78 UNDISTURBED SAMPLE
- U100 UNDISTURBED SAMPLE
- MAZIER SAMPLE (76mm)
- PISTON SAMPLE
- WATER SAMPLE
- PIEZOMETER TIP
- STANDPIPE
- STANDARD PENETRATION TEST
- PERMEABILITY TEST
- IN-SITU VANE SHEAR TEST

LOGGED H.C. Yeung

DATE 19/1/93

CHECKED D. Yuen

DATE 20/3/93

REMARKS

Very stiff, greyish brown sandy CLAY.

(ALLUVIUM)

DRILLHOLE RECORD

W. O. PW7/2/33.105/S1

HOLE NO. ISL/ST/027

SHEET 4 of 5

DATE from 9/1/93 to 15/1/93

CONTRACT GC/91/05 OF C.E.D.

JWLOON EXPRESSWAY LAND SITE INVESTIGATION
(WIND TUNNEL HOLES IN JORDAN AREA)

C-40

CO-ORDINATES

E 834656.07

N 818712.02

ROCK COREBIT T2-101

HOLE DIA.	0.00m-11.00m	SX
	11.00m-36.00m	PX
	36.00m-44.50m	HX

WATER

ORIENTATION VERTICAL

GROUND-LEVEL 8.29 mPD

Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
	100				30 bls	28		30.45				Medium dense, greyish and reddish brown, clayey fine to medium SAND. (ALLUVIUM)
					(33 34,57) N=19	29		31.45				Medium dense, brownish yellow, fine to medium SAND. (ALLUVIUM)
	100				40 bls	30		32.45				Medium dense, brown, silty fine to medium SAND. (ALLUVIUM)
					(22 33,67) N=19	31		33.45				
	100				38 bls	32		34.45				
					(22 34,7,10) N=24	33		35.00				
	100					34		36.45				Extremely weak, greyish brown & pinkish brown, completely decomposed medium grained GRANITE. (Silty fine to medium SAND) Becoming pinkish red at depth 35.00m to 38.00m.
					(56 7,9,11,19) N=45	35		37.00				
						36		38.45				
					P.M.T.			39.00				
								40.00				

SAMPLE	▲	WATER SAMPLE
SAMPLE	□	PIEZOMETER TIP
:	○	STANDPIPE
SAMPLE	↓	STANDARD PENETRATION TEST
3 SAMPLE 76mm)	⊥	PERMEABILITY TEST
	⊗	IN-SITU VANE SHEAR TEST

LOGGED H.C. Yeung

DATE 19/1/93

CHECKED D. Yuen

DATE 20/3/93

REMARKS

P.M.T.  Pressuremeter Test carried out at 39.00m to 40.00m.



CHV TANCHE GROUP
SOIL & FOUNDATIONS SPECIALISTS

DRILLHOLE RECORD

W. O. PW7/2/33.105/S1

HOLE NO. ISL/ST/027

SHEET 5 of 5

DATE from 9/1/93 to 15/1/93

CONTRACT GC/91/05 OF C.E.D.

WEST KOWLOON EXPRESSWAY LAND SITE INVESTIGATION
(ADDITIONAL HOLES IN JORDAN AREA)

ROTARY

CO-ORDINATES

ROCK CORE BIT T2-101

No. CMC-40

E 834656.07

N 818712.02

HOLE DIA. 0.00m-11.00m SX
11.00m-36.00m PX
36.00m-44.50m HX

MEDIUM WATER

ORIENTATION VERTICAL

GROUND-LEVEL 8.29 mPD

Water level/time/date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
5.10m at 19:30	100						37		41.00				See sheet 4 of 5 (C.D.G.)
11.50m at 07:30							38		41.45				
							39		42.00				
							40		42.10				
5.00m at 19:30	100						41		43.00				Extremely weak to weak, pinkish brown, completely to highly decomposed medium grained GRANITE.
11.20m at 07:30							42		43.45				
							43		44.00				(Silty fine to medium SAND with some subangular fine gravel sized rock fragments) PL
							44		44.50				
	100	84	44				45		45.65				Moderately strong to strong, brownish pink and greyish pink, mottled white & black, moderately to slightly decomposed medium grained GRANITE with medium to very closely spaced, rough to smooth & planar, kaolinite and limonite stained joints, dipping 20°-30°, 45°-60° and subvertical. Subvertical joints at : 45.33m-45.48m, 45.47m-45.60m, 45.86m-46.12m, 46.12m-46.30m, 46.18m-46.38m, 46.34m-46.48m, 46.70m-46.93m.
							46		46.93				
							47		47.79				
							48		48.49				
							49		48.80				
							50		48.73				
							51		49.42				
							52		49.84				
	100	38	0				53		49.84				End of Investigation hole at 49.84 m.

RBED SAMPLE ▲ WATER SAMPLE
RBED SAMPLE ⚡ PIEZOMETER TIP
AMPLE ⚡ STANDPIPE
IRBED SAMPLE ↓ STANDARD PENETRATION TEST
URBED SAMPLE ⚡ PERMEABILITY TEST
PLE (75mm) ⚡ IN-SITU VANE SHEAR TEST
PLE

LOGGED H.C. Yeung

DATE 19/1/93

CHECKED D. Yuen

DATE 20/3/93

REMARKS

C.D.G. : Completely decomposed GRANITE

slightly altered

Drillhole Record

Drillhole No. **BH30**

Sheet **1** of **8**

PROJECT Central Kowloon Route and Widening of Gascoigne Road Flyover (Investigation) - Ground Investigation

METHOD Rotary Drilling

CO-ORDINATES

Contract No. **HY/2008/14**

Machine & No. **BR-22**

E 834757.01

Date **29/04/09** to **13/05/09**

N 819181.69

FLUSHING MEDIUM Water

ORIENTATION VERTICAL

GROUND LEVEL +10.77 mPD

Drilling Progress (dd/mm/yyyy)	Casing depth (m) /Size (mm)	Water level (m) /Time (hh:mm)	Water Recovery %	Total core Recovery %	Solid core Recovery %	R.Q.D. %	Fracture Index	F.L. / Test Depth (m)	Tests	Samples No. Type Depth	Reduced Level	Depth (m)	Legend	Grade	Description
29/04/2009										1 • 0.40					Firm, reddish brown occasionally brown, sandy clayey SILT with some angular to subangular fine to coarse gravel sized rock fragments. (FILL)
										2 • 0.90					
										3 • 1.40	+9.27	1.50			
										4 • 1.90					Medium dense, greyish brown, clayey silty fine to coarse SAND with some angular to subangular fine to coarse gravel sized rock fragments. (FILL)
										5 • 2.00					
										6 • 3.00					
										7 • 3.20					
										8 • 3.60	+7.07	3.70			
29/04/2009	0.66m at 18:00			95					3.20	76-131 3.92					Brownish grey occasionally grey, angular to subangular COBBLE with much medium to coarse gravel sized moderately strong to strong granite, tuff, brick, concrete fragments and wood pieces and firm, sandy silt matrix. (FILL)
30/04/2009	Dry at 08:00			91						76-131 4.20					
				70						76-131 4.63					
				50						76-131 5.10					
										9 • 5.50	+5.27	5.50			Firm to stiff, greyish brown, sandy clayey SILT with some angular to subangular fine to coarse gravel sized rock fragments. (FILL)
										10 • 6.50					
										11 • 6.70					
										12 • 7.10					
										13 • 7.50					
										14 • 8.50	+2.17	8.60			
										15 • 9.05					
										16 • 9.20					
30/04/2009	3.03m at 18:00								6.70	17 • 9.60					Very dense, brownish grey occasionally grey, slightly silty fine to coarse SAND with some angular to subangular fine to medium gravel sized rock and shell fragments. (FILL from marine deposits)
04/05/2009	9.06m at								9.20						

- Small Disturbed Sample
- Large Disturbed Sample
- SPT Limer Sample
- U76 Undisturbed Sample
- U100 Undisturbed Sample
- Mazier Sample
- Piston Sample
- Water Sample
- Water Level
- Standard Penetration Test
- Permeability Test
- Piezometer Tip
- Standpipe Tip
- Pressuremeter Test
- Impression Packer Test
- Vane Shear Test

LOGGED **M.Chiu**
DATE **18/05/2009**
CHECKED **P.C.Lee**
DATE **19/05/2009**

REMARKS

1. An inspection pit was excavated by hand to a depth of 2.00m.
2. A falling head permeability test was carried out between depths of 31.20-32.70m.
3. Constant head permeability tests were undertaken between depths of 10.10-11.60m and 43.40-44.90m.
4. Packer test was carried out at the depths of 57.60-70.30m.
5. Impression packer testing were undertaken from depths of 56.60-58.10m, 57.80-59.30m, 59.00-60.50m, 60.20-61.70m, 61.40-62.90m, 62.60-64.10m, 63.80-65.30m and 65.00-66.50m.

Drillhole Record

Drillhole No. BH30

Sheet 2 of 8

PROJECT Central Kowloon Route and Widening of Gascoigne Road Flyover (Investigation) - Ground Investigation

METHOD Rotary Drilling

CO-ORDINATES

Contract No. HY/2008/14

Machine & No. BR-22

E 834757.01

Date 29/04/09 to 13/05/09

N 819181.69

FLUSHING MEDIUM Water

ORIENTATION VERTICAL

GROUND LEVEL +10.77 mPD

Drilling Progress (dd/mm/yyyy)	Casing depth (m) (Size (mm))	Water level (m) /Time (hh:mm)	Water Recovery %	Total core Recovery %	Solid core Recovery %	R.Q.D. %	Fracture Index	F.I. / Test Depth (m)	Tests	Samples No. Type Depth	Reduced Level	Depth (m)	Legend	Grade	Description
		08:00													See previous page
11				89				10.10	B-142	18 10.60					
								11.20	8,9, 12, 14, 16, 18 N=60	19 11.05					
										20 11.20					
										21 11.60					
12															
13				73				13.20	B-120	22 12.60					
									8,11, 13, 15, 17, 18 N=58	23 13.05					
										24 13.20					
										25 13.60					
14															
15	15.10 at 18:00 04/05/2009 68mm	3.87m at 18:00 05/05/2009 8.16m at 08:00		93				15.20	B-146	26 14.60					
									9,12, 15, 17, 19, 22 N=73	27 15.05					
										28 15.20					
										29 15.60					
16															
17				91				17.20	B-282	30 16.60	-5.83	16.60			Very dense, grey, silty fine to coarse SAND with some angular to subangular fine to medium gravel sized rock and shell fragments. (FILL from marine deposits)
									10,19, 18,36,36/70mm (100/220mm)	31 17.05					
										32 17.20					
										33 17.52					
18															
19				96				19.20	B-79	34 18.60					19.20-19.65m:Medium dense.
									6,9, 17, 4, 8, 7 N=30	35 19.05					
										36 19.20					
										37 19.60					
20															

- Small Disturbed Sample
- Large Disturbed Sample
- SPT Liner Sample
- U76 Undisturbed Sample
- U180 Undisturbed Sample
- Mazier Sample
- Piston Sample
- Water Sample
- Water Level
- Standard Penetration Test
- Permeability Test
- Piezometer Tip
- Standpipe Tip
- Pressuremeter Test
- Impression Packer Test
- Vane Shear Test

LOGGED M.Chiu
DATE 18/05/2009
CHECKED P.C.Lee
DATE 19/05/2009

REMARKS

Drillhole Record

Drillhole No. BH30

Sheet 3 of 8

PROJECT Central Kowloon Route and Widening of Gascoigne Road Flyover (Investigation) - Ground Investigation

METHOD Rotary Drilling

CO-ORDINATES

Contract No. HY/2008/14

Machine & No. BR-22

E 834757.01

Date 29/04/09 to 13/05/09

N 819181.69

FLUSHING MEDIUM Water

ORIENTATION VERTICAL

GROUND LEVEL +10.77 mPD

Drilling Progress (d/m/y)	Casing depth (m) /Size (mm)	Water level (m) /Time (hh:mm)	Water Recovery %	Total core Recovery %	Solid core Recovery %	R.Q.D. %	Fracture Index	F.I./Test Depth (m)	Tests	Samples No. Type Depth	Reduced Level	Depth (m)	Legend	Grade	Description
															See previous page
21				89					B-131 3.7, 13.9, 17, 15 N=49	38 20.60 39 21.05 40 21.20 41 21.60	-9.83	20.60			Dense, grey occasionally brownish grey, slightly silty fine to coarse SAND with some angular to subangular fine gravel sized rock and shell fragments. (FILL from marine deposits)
22															
23				90					B-79 4.8, 10.9, 10, 12 N=41	42 22.60 43 23.05 44 23.20 45 23.60					
24		3.02m at 18:00 7.39m at 08:00													
25				73					B-111 6.7, 7.5, 1, 0 N=13	46 24.60 47 25.05 48 25.20 49 25.60	-14.43	25.20			Firm to stiff, dark greenish grey, sandy silty CLAY with some angular to subangular fine gravel sized rock and shell fragments. (MARINE DEPOSITS)
26															
27				91					B-91 8.6, 7.9, 7, 6 N=39	50 26.60 51 27.05 52 27.20 53 27.60	-16.43	27.20			Medium dense, grey, slightly silty fine to coarse SAND with some angular to subangular fine gravel sized rock and shell fragments. (MARINE DEPOSITS)
28															
29				100					B-49 3.4, 4.5, 5, 6 N=20	54 28.60 55 29.05 56 29.20 57 29.60	-17.83	28.60			Medium dense, pinkish brown, clayey silty fine to coarse SAND with some subangular to subrounded fine to medium gravel sized rock fragments. (ALLUVIUM)
30															

- Small Disturbed Sample
- Large Disturbed Sample
- SPT Liner Sample
- U76 Undisturbed Sample
- U100 Undisturbed Sample
- Mazier Sample
- Piston Sample
- Water Sample
- Water Level
- Standard Penetration Test
- Permeability Test
- Piezometer Tip
- Standpipe Tip
- Pressuremeter Test
- Impression Packer Test
- Vane Shear Test

LOGGED M.Chin
DATE 18/05/2009
CHECKED P.C.Lee
DATE 19/05/2009

REMARKS

Drillhole Record

Drillhole No. BH30

Sheet 4 of 8

PROJECT Central Kowloon Route and Widening of Gascoigne Road Flyover (Investigation) - Ground Investigation

METHOD Rotary Drilling

CO-ORDINATES

Contract No. HY/2008/14

Machine & No. BR-22

E 834757.01

Date 29/04/09 to 13/05/09

N 819181.69

FLUSHING MEDIUM Water

ORIENTATION VERTICAL

GROUND LEVEL +10.77 mPD

Drilling Progress (dd/mm/yyyy)	Casing depth (m) Size (mm)	Water level (m) / Time (hh:mm)	Water Recovery %	Total core Recovery %	Solid core Recovery %	R.Q.D. %	Fracture Index	F.L./ Test Depth (m)	Tests	Samples No. Type Depth	Reduced Level	Depth (m)	Legend	Grade	Description
															See previous page
31				93				31.20		58 30.60	-19.83	30.60			Medium dense, yellowish brown, clayey silty fine to coarse SAND with some subangular to subrounded fine to medium gravel sized rock fragments. (ALLUVIUM)
32	2.68m at 18:00							31.80	3.6, 5, 6, 7, 8 N=26	59 31.60 60 31.80 61 32.20					
33	7.32m at 08:00			30						62 32.60					
34				86						63 33.60 64 33.70	-22.93	33.70			33.60-33.70m: With occasional clayey pocket. Medium dense, yellowish brown, silty fine to coarse SAND with some subangular to subrounded fine to medium gravel sized rock fragments. (ALLUVIUM)
35	2.66m at 18:00							34.90	2.3, 3, 4, 3, 4 N=14	65 34.70 66 34.90 67 35.30					
36	9.20m at 08:00			0											
37				90						68 35.70 69 36.70 70 37.80	-24.93	35.70		V	Extremely weak, reddish brown spotted white, grey and brown, completely decomposed medium grained GRANITE. (Firm to stiff, slightly sandy clayey SILT with some fine gravel sized rock fragments.)
38	37.90 140mm							38.00	3.4, 4, 5, 5, 6 N=20	71 38.00 72 38.40 73 38.80					
39				89						74 39.80					

- Small Disturbed Sample
- Large Disturbed Sample
- SPT Liner Sample
- ▨ U76 Undisturbed Sample
- ▩ U100 Undisturbed Sample
- ▧ Mazier Sample
- Piston Sample
- ▲ Water Sample

- z Water Level
- Standard Penetration Test
- Permeability Test
- Piezometer Tip
- Standpipe Tip
- Pressuremeter Test
- Impression Packer Test
- Vane Shear Test

LOGGED M.Chiu
DATE 18/05/2009
CHECKED P.C.Lee
DATE 19/05/2009

REMARKS



Drillhole Record

Drillhole No. BH30

Sheet 5 of 8

PROJECT Central Kowloon Route and Widening of Gascoigne Road Flyover (Investigation) - Ground Investigation

METHOD Rotary Drilling

CO-ORDINATES

Contract No. HY/2008/14

Machine & No. BR-22

N 819181.69

Date 29/04/09 to 13/05/09

FLUSHING MEDIUM	Water
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ORIENTATION VERTICAL

GROUND LEVEL +10.77 mPD

															Description
Drilling Progress (dd/mm/yyyy)	Casing depth (m) /Size (mm)	Water level (m) /Time (hh:mm)	Water Recovery %	Total core Recovery %	Solid core Recovery %	R.Q.D. %	Fracture Index	F.I. / Test Depth (m)	Tests	Samples No. Type Depth	Reduced Level	Depth (m)	Legend	Grade	
								40.00	3, 4, 5, 6, 7 N=24	75 40.00 76 40.40 77 40.80 78 41.80 79 42.00 80 42.40 81 42.80 82 43.80 83 44.00 84 44.40 85 44.80 86 45.80 87 46.00 88 46.40 89 46.80 90 47.80 91 48.00 92 48.40 93 48.80 94 49.90				V	See previous page
08/05/2009 09/05/2009		3.08m at 18:00 8.72m at 08:00						42.00	3, 4, 5, 7, 10, 12 N=34		-31.23	42.00		V	Extremely weak, pinkish brown occasionally pink and greyish brown spotted white, grey and brown, completely decomposed medium grained GRANITE. (Stiff to very stiff, sandy clayey SILT with some fine gravel sized rock fragments.)
								43.40							
								44.00	4, 5, 6, 8, 11, 13 N=38						
09/05/2009 11/05/2009		3.09m at 18:00 8.53m at 08:00						46.00	3, 4, 8, 10, 12, 15 N=45						
											-36.03	46.80		V	Extremely weak to very weak, greyish brown occasionally yellowish brown spotted grey and brown, completely decomposed medium grained GRANITE. (Slightly clayey silty fine to coarse SAND with some fine to medium gravel sized rock fragmen(s).)
								48.00	7, 10, 12, 21, 24, 34 N=97						

Drillhole Record

Drillhole No. **BH30**

Sheet **6** of **8**

PROJECT Central Kowloon Route and Widening of Gascoigne Road Flyover (Investigation) - Ground Investigation

METHOD Rotary Drilling

CO-ORDINATES

Contract No. **HY/2008/14**

Machine & No. **BR-22**

E 834757.01

Date **29/04/09** to **13/05/09**

N 819181.69

FLUSHING MEDIUM Water

ORIENTATION VERTICAL

GROUND LEVEL +10.77 mPD

Drilling Progress (dd/mm/yyyy)	Casing depth (m) (Size (mm))	Water level (m) /Time (hh:mm)	Water Recovery %	Total core Recovery %	Solid core Recovery %	R.Q.D. %	Fracture Index	F.I./Test Depth (m)	Tests	Samples No. Type Depth	Reduced Level	Depth (m)	Legend	Grade	Description	
				92						95 50.90				V	See previous page	
51								51.10	18.27, 39.51, 18/20mm (100/170mm)	96 51.10						
										97 51.37						
52				86						98 51.90						
53								53.10	26, 24/25mm, 57, 43/25mm (200/100mm)	99 52.90						
										100 53.25						
54				0						53.90	-43.13	-53.90		V	Very weak, brown occasionally reddish brown spotted grey and brown, completely decomposed medium grained GRANITE. (Slightly silty fine to coarse SAND with some fine to medium gravel sized rock fragments.)	
55	55.50 115mm			100						101 54.90						
										102 55.00						
										103 55.35	-44.70	-55.47		IV	55.35-55.45m:Sandy fine to coarse gravel sized rock fragments.	
56				81	59	44	NI	55.47			-44.99	-55.76		V	Weak to moderately weak, brown spotted grey and brown, highly decomposed medium grained GRANITE.	
							NR	55.76		T2-101	-45.20	-55.97		III	No recovery, assumed to be completely decomposed GRANITE.	
11/05/2009		3.07m at 18:00					8.6	55.97			-56.60	-45.89	-56.66		II	Strong to very strong occasionally moderately strong, grey occasionally brown spotted pink, black and grey, slightly decomposed medium grained GRANITE with closely to medium occasionally very closely to closely spaced, rough stepped occasionally undulating, limonite stained joints, dipping at 10°-20°, 20°-30° and 40°-50° occasional 0°-10° and 50°-60°.
12/05/2009		8.89m at 08:00					5.1	56.88		T2-101						
57				89	99	99		56.94			-47.27	-58.04		III	55.97-56.66m: Moderately strong, moderately decomposed.	
58							8.5	57.80			-47.54	-58.31		II	56.60m: Slickensided stepped joints, dipping at 0°-10°.	
										T2-101					58.04-58.31m: Moderately strong, moderately decomposed.	
59				89	99	99		58.76							58.56-58.63m: Fine grained granite.	
							2.0	59.00								
60				100	100	97				59.51						
										T2-101						

- Small Disturbed Sample
- Large Disturbed Sample
- ▨ SPT Limer Sample
- ▨ U76 Undisturbed Sample
- ▨ U100 Undisturbed Sample
- ▨ Mazier Sample
- ▨ Piston Sample
- ▲ Water Sample

- z Water Level
- ┆ Standard Penetration Test
- ┆ Permeability Test
- ┆ Piezometer Tip
- ┆ Standpipe Tip
- ┆ Pressuremeter Test
- ┆ Impression Packer Test
- ┆ Vane Shear Test

LOGGED **M.Chin**

DATE **18/05/2009**

CHECKED **P.C.Lee**

DATE **19/05/2009**

REMARKS



Gold Ram Engineering
and Development
Limited

Drillhole Record

Drillhole No. BH30

Sheet 7 of 8

PROJECT Central Kowloon Route and Widening of Gascoigne Road Flyover (Investigation) - Ground Investigation

METHOD Rotary Drilling

CO-ORDINATES

Contract No. HY/2008/14

Machine & No. BR-22

E 834757.01

Date 29/04/09 to 13/05/09

N 819181.69

FLUSHING MEDIUM Water

ORIENTATION VERTICAL

GROUND LEVEL +10.77 mPD

Drilling Progress (dd/mm/yyyy)	Casing depth (m) /Size (mm)	Water level (m) /Time (hh:mm)	Water Recovery %	Total core Recovery %	Solid core Recovery %	R.Q.D. %	Fracture Index	F.L./Test Depth (m)	Tests	Samples No. Type Depth	Reduced Level	Depth (m)	Legend	Grade	Description
				100	100	97	2.0	60.28			-49.49	60.26	+	II	See previous page
				100	100	97	16.7	60.50		T2-101			+	III	Moderately strong occasionally strong, brown occasionally grey and pink spotted pink, grey and brown, moderately decomposed medium grained GRANITE with closely to medium occasionally very closely spaced, rough stepped and undulating, limonite and manganese oxide stained joints, dipping at 20°-30°, 50°-60° and 70°-80° occasional 40°-50°.
61				100	85	75	4.0	61.00			-61.00		+	II	
				100	85	75	10.9	61.40		T2-101	-50.93	61.70	+	II	61.70-62.00m: Very strong, slightly decomposed.
62				100	85	75	1.9	61.55			-51.23	62.00	+	III	
				100	87	87	9.5	62.07			-62.39		+	II	
63				100	87	87	1.9	62.60		T2-101	-52.14	62.91	+	II	62.91-63.03m: Very strong, slightly decomposed.
				100	87	87	4.3	62.70			-52.26	63.03	+	III	
				100	87	87	7.1	63.20			-52.45	63.22	+	II	
64				100	100	89	20	63.45		T2-101	-53.20	63.97	+	II	Strong to very strong occasionally moderately strong, grey occasionally pink and brown spotted pink, black and grey, slightly decomposed medium grained GRANITE with medium to widely occasionally closely spaced, rough stepped and undulating occasionally planar, limonite, manganese oxide and chlorite stained, calcite coated (up to 1mm) joints, dipping at 20°-30°, 40°-50° and 50°-60° occasional 10°-20°, 30°-40° and 70°-80°.
				100	100	89	1.2	63.80			-53.34	64.11	+	III	
65				100	92	88	8.5	63.95			-64.49		+	II	63.97-64.11m: Moderately strong, moderately decomposed.
				100	92	88	2.3	64.78		T2-101			+	II	64.76-65.04m: Subvertical joint.
66				100	92	88	6.3	65.00					+	II	
				100	92	88	2.3	65.25					+	II	
67				100	100	96	1.3	65.69		T2-101			+	II	
				100	100	96	8.3	66.01			-66.01		+	II	
68				100	100	96	1.3	66.79		T2-101			+	II	
				100	100	96	8.3	67.03			-67.47		+	II	
69				100	100	96	0.7	68.42		T2-101			+	II	
				100	100	96	4.7	68.85			-68.85		+	II	
70				100	100	100	1.7	69.43		T2-101			+	II	
				100	100	100	3.4						+	II	

- Small Disturbed Sample
- Large Disturbed Sample
- SPT Liner Sample
- U76 Undisturbed Sample
- U100 Undisturbed Sample
- Mazier Sample
- Piston Sample
- Water Sample

- Water Level
- Standard Penetration Test
- Permeability Test
- Piezometer Tip
- Standpipe Tip
- Pressuremeter Test
- Impression Packer Test
- Vane Shear Test

LOGGED M.Chiu
DATE 18/05/2009
CHECKED P.C.Lee
DATE 19/05/2009

REMARKS



Drillhole Record

Drillhole No. BH30

Sheet 8 of 8

PROJECT Central Kowloon Route and Widening of Gascoigne Road Flyover (Investigation) - Ground Investigation

METHOD Rotary Drilling

CO-ORDINATES

Contract No. HY/2008/14

Machine & No. BR-22

E 834757.01

Date 29/04/09 to 13/05/09

N 819181.69

FLUSHING MEDIUM Water

ORIENTATION VERTICAL

GROUND LEVEL +10.77 mPD

Drilling Progress (dd/mm/yyyy)	Casing depth (m) /Size (mm)	Water level (m) /Time (hh:mm)	Water Recovery %	Total core Recovery %	Solid core Recovery %	R.Q.D. %	Fracture Index	EL / Test Depth (m)	Tests	Samples No. Type Depth	Reduced Level	Depth (m)	Legend	Grade	Description
				100	100	100	1.3	70.02		70.00			+	II	See previous page
71							9.6	70.78		T2-101			+		
13/05/2009										71.30	-60.53	71.30	+		Drillhole completed at 71.30m
72															
73															
74															
75															
76															
77															
78															
79															
80															

- Small Disturbed Sample
- Large Disturbed Sample
- ▨ SPT Liner Sample
- ▨ U76 Undisturbed Sample
- ▨ U100 Undisturbed Sample
- ▨ Mazier Sample
- Piston Sample
- ▲ Water Sample
- ✕ Water Level
- Standard Penetration Test
- Permeability Test
- Piezometer Tip
- ▲ Standpipe Tip
- Pressuremeter Test
- Impression Packer Test
- ✓ Vane Shear Test

LOGGED MLChiu

DATE 18/05/2009

CHECKED P.C.Lee

DATE 19/05/2009

REMARKS



BACHY SOLETANCHE GROUP
SOIL & FOUNDATIONS SPECIALISTS

DRILLHOLE RECORD

W. O. NO. 14
DRILLHOLE NO. LAR/503/D063
SHEET 1 of 5
DATE from 19/5/94 to 23/5/94

CONTRACT 530E

CLIENT: MASS TRANSIT RAILWAY CORPORATION

PROJECT: LANTAU AND AIRPORT RAILWAY - GROUND INVESTIGATION

LOCATION: KOWLOON STATION AND WESTERN ELEVATED ROAD

METHOD ROTARY

CO-ORDINATES

MACHINE & No. CMC-40

E 834578.06

N 818500.11

FLUSHING MEDIUM WATER

ORIENTATION VERTICAL

ROCK COREBIT T2-101

HOLE DIA. 0.00m-6.00m SX
6.00m-30.00m PX

GROUND-LEVEL +5.08 mPD

Drilling Progress	Casing depth/size	Water level/time/date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
1	SX										0.00				
19/5/94															
2															
3															
4															
5															
6	6.00m SX PX														
20/5/94															
7															
8															
9															
10	PX														

- SMALL DISTURBED SAMPLE
- LARGE DISTURBED SAMPLE
- SPT UNER SAMPLE
- U76 UNDISTURBED SAMPLE
- U100 UNDISTURBED SAMPLE
- MAZIER SAMPLE (76mm)
- PISTON SAMPLE
- WATER SAMPLE
- PIEZOMETER TIP
- STANDPIPE
- STANDARD PENETRATION TEST
- PERMEABILITY TEST
- IN-SITU VANE SHEAR TEST

LOGGED TSAO HSU

DATE 26/5/94

CHECKED M. D.

DATE 2/6/94

REMARKS

Loose to medium dense, grey and yellowish brown, fine to medium SAND, occasional with some coarse sand, gravel and shell fragments.

(FILL)



BACHY SOLETANCHE GROUP
SOIL & FOUNDATIONS SPECIALISTS

DRILLHOLE RECORD

W. O. NO. 14
DRILLHOLE NO. LAR/503/D063
SHEET 2 of 5
DATE from 19/5/94 to 23/5/94

CONTRACT 530E

CLIENT: MASS TRANSIT RAILWAY CORPORATION

PROJECT: LANTAU AND AIRPORT RAILWAY - GROUND INVESTIGATION

ROCK COREBIT T2-101

LOCATION: KOWLOON STATION AND WESTERN ELEVATED ROAD

METHOD ROTARY

CO-ORDINATES

MACHINE & No. CMC-40

E 834578.06

N 818500.11

HOLE DIA. 0.00m-6.00m SX
6.00m-30.00m PX

FLUSHING MEDIUM WATER

ORIENTATION VERTICAL

GROUND-LEVEL +5.08 mPD

Drilling Progress	Casing depth/size	Water level/time/date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
11	PX			100				(2,3) (2,2,3) N=9	10		10.00 10.45				
12								8, 10, 14 22 bls	11		11.00 11.45				
13				89				(2,2) (4,3,4) N=14	12		12.00 12.45				
14								7, 11, 13 31 bls	13		13.00 13.45				
15				100				(3,3) (2,3,3,4) N=12	14		14.00 14.45				
16								10, 8, 10 28 bls	15		15.00 15.45				
17				100				(5,6) (6,5,5,8) N=24	16		16.00 16.45				
18								8, 9, 11 26 bls	17		17.00 17.45				
19				100				(4,4) (3,3,3,5) N=14	18		18.00 18.45				
20	PX							7, 8, 8 23 bls	19		19.00 19.45				
										-14.92	20.00				

(See sheet 1 of 5)

- SMALL DISTURBED SAMPLE
- LARGE DISTURBED SAMPLE
- SPT LINER SAMPLE
- U76 UNDISTURBED SAMPLE
- U100 UNDISTURBED SAMPLE
- MAZIER SAMPLE (76mm)
- PISTON SAMPLE
- WATER SAMPLE
- PIEZOMETER TIP
- STANDPIPE
- STANDARD PENETRATION TEST
- PERMEABILITY TEST
- IN-SITU VANE SHEAR TEST

LOGGED TSAO HSU

DATE 26/5/94

CHECKED M. D.

DATE 2/6/94

REMARKS



BACHY SOLETANCHE GROUP
SOIL & FOUNDATIONS SPECIALISTS

DRILLHOLE RECORD

W. O. NO. 14
DRILLHOLE NO. LAR/503/D063
SHEET 3 of 5
DATE from 19/5/94 to 23/5/94

CONTRACT 530E

CLIENT: MASS TRANSIT RAILWAY CORPORATION

PROJECT: LANTAU AND AIRPORT RAILWAY - GROUND INVESTIGATION

ROCK COREBIT T2-101

LOCATION: KOWLOON STATION AND WESTERN ELEVATED ROAD

METHOD ROTARY

CO-ORDINATES

HOLE DIA 0.00m-6.00m SX
6.00m-30.00m PX

MACHINE & No. CMC-40

E 834578.06

N 818500.11

GROUND-LEVEL +5.08 mPD

FLUSHING MEDIUM WATER

ORIENTATION VERTICAL

Drilling Progress	Casing depth/size	Water level/time/date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (E)	Legend	Grade	Zone	Description
20/5/94	PX							(33 34.56) N=18	20		20.00				
21				100				6, 6, 9 21 bls	21		20.45				
22								(45 65.66) N=23	22		21.00				
23				100				11, 18, 24 53 bls	23		21.45				(See sheet 1 of 5)
24								(47 77.56) N=25	24		22.00				
25				100				9, 13, 21 43 bls	25		22.45				
26								(33 32.23) N=10	26		23.00				
27				100				2, 2, 3 7 bls	27		23.45				Stiff, light grey, sandy silty CLAY with some gravel. (ALLUVIUM)
28								(32 35.45) N=17	28		24.00				
29				100				3, 4, 5 12 bls	29		24.45				(See sheet 4 of 5)
30	PX										24.92				

- SMALL DISTURBED SAMPLE
- LARGE DISTURBED SAMPLE
- SPT LINER SAMPLE
- U78 UNDISTURBED SAMPLE
- U100 UNDISTURBED SAMPLE
- MAZIER SAMPLE (76mm)
- PISTON SAMPLE
- WATER SAMPLE
- PIEZOMETER TIP
- STANDPIPE
- STANDARD PENETRATION TEST
- PERMEABILITY TEST
- IN-SITU VANE SHEAR TEST

LOGGED TSAO HSU

DATE 26/5/94

CHECKED M. D.

DATE 2/6/94

REMARKS



BACHY SOLETANCHE GROUP
SOIL & FOUNDATIONS SPECIALISTS

DRILLHOLE RECORD

W. O. NO. 14
DRILLHOLE NO. LAR/503/D063
SHEET 4 of 5
DATE from 19/5/94 to 23/5/94

CONTRACT 530E

CLIENT: MASS TRANSIT RAILWAY CORPORATION

PROJECT: LANTAU AND AIRPORT RAILWAY - GROUND INVESTIGATION

LOCATION: KOWLOON STATION AND WESTERN ELEVATED ROAD

METHOD ROTARY

CO-ORDINATES

MACHINE & No. CMC-40

E 834578.06

N 818500.11

ROCK COREBIT T2-101

HOLE DIA. 0.00m-6.00m SX
6.00m-30.00m PX

GROUND-LEVEL +5.08 mPD

FLUSHING MEDIUM WATER

ORIENTATION VERTICAL

Drilling Progress	Casing depth/size	Water level/time/date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
31				100				(12 212.3) N=8	30		30.00				Loose to medium dense, yellowish brown, very silty medium to coarse SAND with some gravels. (ALLUVIUM)
32		21/5/94						(22 233.2) N=10	31		30.45				
33				100				(44 436.8) N=23	32		31.00				Extremely weak, light pinkish grey spotted with white, completely decomposed medium to coarse grained GRANITE.
34									33		31.45				(Medium dense, silty SAND with some gravel.) (C. D. G.)
35									34		32.00				
36											32.45				
37		23/5/94		100	100	100	4.9				33.00				Strong to very strong, pinkish grey, spotted with green and pink, equigranular, slightly decomposed medium to coarse grained GRANITE. Joints are medium to widely spaced, rough and smooth planar, with limonite stained dip at : 10-20 deg, 35-45 deg & 65-75 deg. (S. D. G.)
38				100	100	93	4.6		T2-101		34.00				
39				100	100	100	2				34.45				
40											35.00				
											35.63				
											37.05				
											38.55				
											40.00				

- SMALL DISTURBED SAMPLE
- LARGE DISTURBED SAMPLE
- SPT LINER SAMPLE
- U78 UNDISTURBED SAMPLE
- U100 UNDISTURBED SAMPLE
- MAZIER SAMPLE (76mm)
- PISTON SAMPLE
- WATER SAMPLE
- PIEZOMETER TIP
- STANDPIPE
- STANDARD PENETRATION TEST
- PERMEABILITY TEST
- IN-SITU VANE SHEAR TEST

LOGGED TSAO HSU
DATE 26/5/94
CHECKED M. D.
DATE 2/6/94

REMARKS

BACHY
SOLETANCHEBACHY SOLETANCHE GROUP
SOIL & FOUNDATIONS SPECIALISTS

DRILLHOLE RECORD

W. O. NO. 14
DRILLHOLE NO. LAR/503/D063
SHEET 5 of 5
DATE from 19/5/94 to 23/5/94

CONTRACT 530E

CLIENT: MASS TRANSIT RAILWAY CORPORATION

PROJECT: LANTAU AND AIRPORT RAILWAY - GROUND INVESTIGATION

ROCK COREBIT T2-101

LOCATION: KOWLOON STATION AND WESTERN ELEVATED ROAD

METHOD ROTARY

CO-ORDINATES

MACHINE & No. CMC-40

E 834578.06

N 818500.11

HOLE DIA. 0.00m-8.00m SX
6.00m-30.00m PX

FLUSHING MEDIUM WATER

ORIENTATION VERTICAL

GROUND-LEVEL +5.08 mPD

Drilling Progress	Casing depth/size	Water level/time/date	Water Recovery %	Total core Recovery %	Solid core Recovery %	R. Q. D.	Fracture Index	Tests	Samples	Reduced Level	Depth (m)	Legend	Grade	Zone	Description
23/5/94				100	100	100	1.7		T2-101		40.00 40.05 36.17 41.25	++ ++ ++ ++	++ ++ ++ ++	II	(See sheet 4 of 5)
41															End of investigation hole at 41.25 m.
42															
43															
44															
45															
46															
47															
48															
49															
50															

- SMALL DISTURBED SAMPLE
- ↑ LARGE DISTURBED SAMPLE
- ▬ SPT LINER SAMPLE
- ▨ U76 UNDISTURBED SAMPLE
- ▩ U100 UNDISTURBED SAMPLE
- ▧ MAZIER SAMPLE (76mm)
- PISTON SAMPLE
- ▲ WATER SAMPLE
- ⬇️ PIEZOMETER TIP
- ⬇️ STANDPIPE
- ⬇️ STANDARD PENETRATION TEST
- ⬇️ PERMEABILITY TEST
- ⊗ IN-SITU VANE SHEAR TEST

LOGGED TSAO HSU

DATE 26/5/94

CHECKED M. D.

DATE 2/6/94

REMARKS