

4. LOG SHEET ALONG THE ALIGNMENT



DEFINITIONS USED IN DESCRIPTION OF ROCK CORES

WEATHERING GRADE

- I A Fresh - No visible sign of weathering
- II B Faint - Discolouration on major discontinuity surfaces
- III C Slightly - Penetrative weathering on open discontinuities but only slight weathering of rock mass
- IV D Moderately - Weathering extends throughout but rock mass not friable
- V E Highly - Weathering extends throughout and rock mass is friable.
- VI F Completely - Rock is wholly decomposed and friable but structure and texture are still maintained
- VII G Residual Soil - Rock completely converted to soil and structure etc. destroyed.

DISCONTINUITY SPACING

- |                 |                 |
|-----------------|-----------------|
| <u>Term</u>     | <u>Spacing</u>  |
| Very wide       | > 2m            |
| Wide            | 600 mm - 2m     |
| Moderately wide | 200 mm - 600 mm |
| Close           | 60 mm - 200 mm  |
| Very close      | 20 mm - 60 mm   |
| Extremely close | < 20 mm         |

DISCONTINUITY INCLINATION

The figures quoted on the right of the "Description" column of the borehole logs are the angles in degrees of the discontinuities measured from the horizontal.

GRAIN SIZE

- |             |                      |                             |
|-------------|----------------------|-----------------------------|
| <u>Term</u> | <u>Particle size</u> | <u>Equivalent soil term</u> |
| Very coarse | > 60mm               | Boulders & Cobbles          |
| Coarse      | 2 - 60mm             | Gravel                      |
| Medium      | 60 micron - 2mm      | Sand                        |
| Fine        | 2 - 60 micron        | Silt                        |
| Very fine   | < 2 micron           | Clay                        |

ABBREVIATIONS

- T.C.R. - TOTAL CORE RECOVERY  
Total of all core recovered including fragmental material
- S.C.R. - SOLID CORE RECOVERY  
Length of core recovered having full diameter
- R.Q.D. - ROCK QUALITY DESIGNATION  
Total length of core of full diameter & length 100mm or greater
- F.I. - FRACTURE INDEX is the number of natural fractures over an arbitrary length within which the fracture spacing is relatively constant.
- N.I. - Non intact i.e. fragmented, not full diameter.
- W.R.L. - WATER REST LEVEL is the level of water within the borehole in respect to ground level. (suffix 'v' before the figure indicates the level as above ground level).





Equipment & Methods: Rotary auger 150mm dia.  
G.L. to 1.50m, Rotary coring 101mm dia. 1.50-8.25m

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY

Ground Level

Coordinates

Date

18\_20/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records						
				Depth	Sample Type	Sample No	Test	F.I	TCR	RQD	GRADE		
Reddish brown SILTY CLAY.			(1.00)	G.L. - 1.00		B1							
Moderately weathered brownish grey pyroclastic TUFF.			1.00	1.00 - 1.45		D2							
			(1.95)	1.45 - 2.95					2	100	20	III	
Slightly weathered with widely spaced fractures brown with grey patches pyroclastic TUFF of subangular grey, altered greenish grey pumice inclusions upto 4cm in fine grained brown matrix.	70°		2.95	2.95 - 4.45					3	100	67		
Becomes grey from 7.75m	80°		(5.30)	4.45 - 5.95					2	100	40	II	
Fractures steep rough clay filled/linonite coated.	90°			5.95 - 7.45					1	100	48		
				7.45 - 8.25					0	100	100		
END OF BOREHOLE				8.25									

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

Sample / Test Key.

- D Disturbed sample
- B Bulk sample
- W Water sample
- P Piston (P) Tube (U) or core sample length to scale
- S Standard Penetration Test
- V Vane Test
- C Core recovery
- R Rock Quality Designation (RQD - %)

Remarks

A-85

Logged by

J. O.

Scale

1:50

Fig.

DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column

W.R.L: Water level observations during boring are given on the last sheet of log.





Equipment & Methods. See Sheet 1  
Location. NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY  
Ground Level Coordinates Date 18\_20/7/90

Description						Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
									Depth	Sample Type	Test No	
DATE	TIME	DEPTH (M)			REMARKS							
		HOLE	CASING	W.R.L								
18/7/90	18.00	1.00	NIL	DRY								
19/7/90	18.00	1.45	1.00	DRY								
20/7/90	18.00	8.25	1.00	2.00								

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column

W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key:  
 D Disturbed sample  
 B Bulk sample  
 W Water sample  
 P Piston (P) Tube (U) or core sample length to scale  
 S Standard Penetration Test  
 V Vane Test  
 C Core recovery  
 r Rock Quality Designation (RQD) (%)

Remarks

Logged by J.O.  
Scale 1:50  
Fig. A-86







Equipment & Methods. Rotary auger 150mm dia. G.L.-8.10m	Location. NAIROBI BY-PASS
--	------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 13,15,17/7/90
---	--------------	-------------	-----------------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Soft becoming firm and hard reddish brown SILTY CLAY.			G.L. - 1.00		B1		U100BLOWS39
			1.00 - 1.45		U2		
			1.45 - 1.50		D3		
			1.50 - 1.95		D4	N <sup>S</sup> = 6	
			1.00 - 2.00		B5		
			2.00 - 2.45		U6		
			2.45 - 2.50		D7	N <sup>S</sup>	
			2.50 - 2.95		D8	N = 11	
			3.00 - 3.45		D9	N <sup>S</sup> = 10	
			3.00 - 4.00		B10		
Hard brown slightly sandy SILTY CLAY with some fine gravel.			4.00 - 4.45		D11	N <sup>S</sup> = 32	U100BLOWS50
			4.00 - 5.00		B12		
			5.00 - 5.45		D13	N <sup>S</sup> = 39	
			5.00 - 6.00		B14		
Very compact brown sandy SILT with weathered gravel. (tuff)			6.00 - 6.45		D15	N <sup>S</sup> = 38	
			6.00 - 7.00		B16		
			7.00 - 7.45		D17	N <sup>S</sup> = 49	
END OF BOREHOLE			7.00 - 8.00		B19		
			8.00 - 8.45		D20	N <sup>S</sup> = 34	

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres. Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>R Rock Quality Designation (RQD) (%)</p>	<p>Remarks</p> <p>A-87</p>	Logged by J.O.
			Scale 1:50
			Fig.





Equipment & Methods: Rotary auger 150mm dia.  
G.L.-5.00m

Location:

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level

Coordinates

Date

22/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records		
				Depth	Sample Type	Test No			
Stiff becoming hard reddish brown SILTY CLAY.		x x	(5.00)	G.L. - 1.00		B1			
		x x		1.00 - 1.45		D2	S N=24		
		x x		1.00 - 2.00		B3			
		x x		2.00 - 2.45		D4	S N=49		
		x x		2.00 - 3.00		B5			
		x x		3.00 - 3.45		D6	S N=28		
		x x		3.00 - 4.00		B7			
		x x		4.00 - 4.45		D8	S N=50		
		x x		4.00 - 5.00		B9			
		x x		5.00 - 5.45		D10	S N=53		
		x		5.00 - 6.00		B11			
	Very compact orange brown slightly sandy CLAYEY SILT (completely weathered tuff)			x	(3.00)	6.00 - 6.45		D12	S N=50
				x		6.00 - 7.00		B13	
				x		7.00 - 8.00		B14	
END OF BOREHOLE		x	8.00						

S.P.T.: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column

W.R.L.: Water level observations during boring are given on the test sheet of log.

Sample / Test Key.

- D Disturbed sample
- B Bulk sample
- W Water sample
- P Piston (P) Tube (U) or core sample length to scale
- S Standard Penetration Test
- V Vane Test
- C Core recovery
- r Rock Quality Designation (RQD - %)

Remarks

A-88

Logged by  
J. O.

Scale  
1:50

Fig.





Equipment & Methods. Rotary auger 150mm dia.  
G.L.-6.00m, Rotary coring 101mm dia. 6.00- 9.15m

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level

Coordinates

Date

27, 28/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records											
				Depth	Sample Type No	Test												
Firm becoming hard reddish brown SILTY CLAY.		x x		G.L. - 1.00	B1													
		x x		1.00 - 1.45	D2	S N = 8												
		x x		1.00 - 2.00	B3													
		x x		2.00 - 2.45	D4	S N = 8												
		x x		2.00 - 3.00	B5													
		x x		3.00 - 3.45	D6	S N = 8												
		x x		3.00 - 4.00	B7													
		x x		4.00 - 4.45	D8	S N = 28												
		x x		4.00 - 5.00	B9													
		x x		5.00 - 5.45	D10	S N = 50												
High weathered brown pyroclastic TUFF.		Δ Δ	3.50	5.00 - 6.00	B11													
		Δ Δ		6.00 - 7.10			<table border="1"> <tr> <th>FI</th> <th>TCR</th> <th>RQD</th> <th>GRADE</th> </tr> <tr> <td>0</td> <td>100</td> <td>63</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>III</td> </tr> </table>	FI	TCR	RQD	GRADE	0	100	63				
FI	TCR	RQD	GRADE															
0	100	63																
			III															
Moderately weathered brown pyroclastic TUFF of angular pumice upto 3cm; occasional lava fragments, in fine altered matrix.		Δ Δ	(260)	7.10 - 8.60			<table border="1"> <tr> <td>3</td> <td>100</td> <td>26</td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td>II</td> </tr> </table>	3	100	26					II			
	3	100	26															
			II															
Moderately weathered with closely and medium spaced fractures grey uniform fine grained TRACHYTE.		V V	(50)	8.60 - 9.10			<table border="1"> <tr> <td>3</td> <td>100</td> <td>26</td> <td>IV</td> </tr> </table>	3	100	26	IV							
	3	100	26	IV														
Highly weathered machine broken brown TRACHYTE with black ferruginous spots.		V V	(0.80)	9.10 - 9.90														

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

Sample / Test Key.  
 D Disturbed sample  
 B Bulk sample  
 W Water sample  
 P Piston (P) Tube (U) or core sample length to scale  
 S Standard Penetration Test  
 V Vane Test  
 C Core recovery  
 r Rock Quality Designation

Remarks

A-89

Logged by  
J. O.  
Scale  
1:50  
Fig.

DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column  
 W.R.L: Water level observations during boring are given on the last sheet of log.





Equipment & Methods.

See Sheet 1

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY

Ground Level

Coordinates

Date

27, 28/7/90

Description						Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
									Depth	Sample Type	Test No	
END OF BOREHOLE												
DATE	TIME	DEPTH (M)			REMARKS							
		HOLE	CASING	W.R.L.								
27/7/90	7.00	NIL	NIL	NIL								
	18.00	7.10	5.05	1.20								
28/7/90	7.00	7.10	5.05	2.00								
	18.00	9.90	NIL	2.20								

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres. Thickness given in brackets in depth column

W.R.L: Water level observations during boring are given on the test sheet of log.

Sample / Test Key.

- D Disturbed sample
- B Bulk sample
- W Water sample
- P Piston (P) Tube (U) or core sample length to scale
- S Standard Penetration Test
- V Vane Test
- C Core recovery
- r Rock Quality Designation

Remarks

A-90

Logged by

J.O.

Scale

1:50

Fig.







Equipment & Methods. Rotary auger 150mm dia. G.L.-8.15m. Rotary coring 101mm dia. 8.15-9.15m

Location

NAIROBI BY - PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY

Ground Level

Coordinates

Date

1/8/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample		
					Type	No	
Firm to steep becoming hard reddish brown SILTY CLAY.		X X		G.L. - 1.00		B1	
		X X		1.00 - 1.45	D2		S N = 12
		X X		1.45 - 2.00		B3	
		X X		2.00 - 2.45	D4		S N = 20
		X X		2.45 - 3.00		B5	
		X X		3.00 - 3.45	D6		S N = 31
		X X		3.45 - 4.00		B7	
		X X		4.00 - 4.45	D8		S N = 32
		X X		4.45 - 5.00		B9	
		X X		5.00 - 5.45	D10		S N = 32
		X X		5.45 - 6.00		B11	
		X X		6.00 - 6.45	D12		S N = 28
		X X		6.45 - 7.00		B13	
Hard orange brown CLAYEY SILT trace sand.		X X	7.00 - 7.45	D14		S N = 48	
		X X	7.45 - 8.00		B15		
Moderately weathered fine to coarse grained TUFF.		△	8.00 - 8.45	D16		S N = 56	
		△	8.45 - 9.15				
Completely weathered clayey TUFF as above.		△					
END OF BOREHOLE							

F.I	TCR	RQD	GRADE
3	100	33	III
			V

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)  
 DEPTHS: All depths and reduced levels in metres  
 Thickness given in brackets in depth column  
 W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.  
 D Disturbed sample  
 B Bulk sample  
 W Water sample  
 P Piston (P) Tube (U) or core sample length to scale  
 S Standard Penetration Test  
 V Vane Test  
 C Core recovery  
 r Rock Quality Designation

Remarks  
 A-91

Logged by  
 J.O.  
 Scale  
 1:50  
 Fig.





Equipment & Methods. Rotary auger 150mm dia. 6.4-7.0m. Rotary coring 101mm dia. 4.70-11.00m

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY

Ground Level

Coordinates

Date

29\_30/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type No	Test	
Firm to stiff and stiff reddish brown SILTY CLAY.		x x	(4.00)	G.L. - 1.00	B1		
		x x		1.00 - 1.45	D2	S N=14	
		x x		1.00 - 2.00	B3		
		x x		2.00 - 2.45	D4	S N=15	
		x x		2.00 - 3.00	B5		
		x x		3.00 - 3.45	D6	S N=22	
		x x		3.00 - 4.00	B7		
		x		4.00			
Completely weathered orange brown TRACHYTE (as sandy clayey silt)		VVVV	(1.40)	4.00 - 4.45	D8	S N=25	
		VVVV		4.00 - 4.70	B9		
Highly weathered light grey fine grained TRACHYTE		VVVV	(0.80)	4.70 - 6.20			F.I. TCR RQD GRADE 3 83 20 V
		VVVV		6.20			IV
Slightly weathered with widely spaced fractures grey fine grained vesicular and porphyritic TRACHYTE.  Vesicles upto 2cm linear, some lined with limonite/green chloritic material.  Fractures steep rough limonite/clay lined.		VVVV	(3.80)	6.20 - 7.70			2 100 85
		VVVV		7.70 - 8.70			3 100 70 11
		VVVV		8.70 - 10.00			1 100 69

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)  
 DEPTHS: All depths and reduced levels in metres  
 Thickness given in brackets in depth column  
 W.R.L: Water level observations during boring are given on the test sheet of log.

Sample / Test Key.  
 D Disturbed sample  
 B Bulk sample  
 W Water sample  
 P Piston (P) Tube (U) or core sample length to scale  
 S Standard Penetration Test  
 V Vane Test  
 C Core recovery  
 R Rock Quality Designation

Remarks  
 A-92

Logged by  
 J.O.  
 Scale  
 1:50  
 Fig.





# Mowlem Construction Co. Ltd.

Borehole No. BE 6  
Sheet 2 of 2

Equipment & Methods. See Sheet 1	Location. NAIROBI BY-PASS
-------------------------------------	------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 29_30/7/90
---	--------------	-------------	--------------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records				
				Depth	Sample Type	Sample No	Test	Records			
Completely weathered non intact light greenish grey fine grained TRACHYTE. Zonally reddish brown.		VVVVVV	(1.00) 11.00	10.00-11.00				NI	100	0	V
END OF BOREHOLE											

DATE	TIME	DEPTH (M)			REMARKS
		HOLE	CASING	W.R.L.	
29/7/90	7.00	NIL	NIL	DRY	
	18.00	10.00	3.60	2.00	
30/7/90	7.00	10.00	3.60	3.00	
	18.00	11.00	NIL	3.10	

<p>S.P.T.: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L.: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <ul style="list-style-type: none"> <li>D Disturbed sample</li> <li>■ Bulk sample</li> <li>W Water sample</li> <li>▬ Piston (P) Tube (U) or core sample length to scale</li> <li>S Standard Penetration Test</li> <li>V Vane Test</li> <li>C Core recovery</li> <li>r Rock Quality Designation</li> </ul>	<p>Remarks</p> <p>A-93</p>	Logged by J.O.
			Scale 1:50
			Fig.





Equipment & Methods. Rotary auger 150mm dia.  
6.1-6.45m. Rotary coring 191mm dia. 6.45-11.30m

Location.

NAIROBI BY PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY

Ground Level

Coordinates

Date

30.31/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Stiff becoming hard reddish brown SILTY CLAY with sparse black ferruginous impregnation.		x x	G.L. - 1.00		B1		
		x x	1.00 - 1.45		D2	S N = 21	
		x x	1.45 - 2.00		B3		
		x x	2.00 - 2.45		D4	S N = 53	
		x x	2.45 - 3.00		B5		
		x x	3.00 - 3.45		D6	S N = 59	
		x x	3.45 - 4.00		B7		
		x x	4.00 - 4.45		D8	S N = 47	
		x x	4.45 - 5.00		B9		
		x x	5.00 - 5.45		D10	S N = 58	
		x x	5.45 - 6.00		B11		
	Completely weathered non intact grey fine grained TRACHYTE.		v v v v	6.00 - 6.45		D12	S N = 85
		v v v v	6.45 - 7.20				F.I TCR RQD GRADE
		v v v v	7.20 - 8.20				NI 100 0 V
Reddish brown SILTY CLAY.		x x	7.70 - 7.90				-
Completely weathered non intact grey fine grained altered TRACHYTE		v v v v	7.90 - 8.20				V
Reddish brown SILTY CLAY		x x	8.20 - 8.40				-
Completely weathered light grey fine grained vesicular and porphyritic TRACHYTE with reddish brown clay pockets.		v v v v	8.20 - 9.70				NI 93 0 V

S.P.T. Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)  
 DEPTHS: All depths and reduced levels in metres  
 Thickness given in brackets in depth column  
 W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key  
 D Disturbed sample  
 B Bulk sample  
 W Water sample  
 P Piston (P) Tube (U) or core sample length to scale  
 S Standard Penetration Test  
 V Vane Test  
 C Core recovery  
 r Rock Quality Designation (RQD - %)

Remarks  
 A-94

Logged by  
 J.O.  
 Scale  
 1:50  
 Fig.







Equipment & Methods. See Sheet 1 Location. NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY Ground Level Coordinates Date 30/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records				
				Depth	Sample		Test				
					Type	No					
(as above)  Completely weathered light grey fine grained vesicular and porphyritic TRACHYTE.		VVVVVV VVVVVV VVVVVV VVVVVV VVVVVV VVVVVV VVVVVV VVVVVV	(1.30)        11.30	9.70-11.30				NI	100	0	V
END OF BOREHOLE											

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <ul style="list-style-type: none"> <li>D Disturbed sample</li> <li>B Bulk sample</li> <li>W Water sample</li> <li>P Piston (P) Tube (U) or core sample length to scale</li> <li>S Standard Penetration Test</li> <li>V Vane Test</li> <li>C Core recovery</li> <li>r Rock Quality Designation (RQD - %)</li> </ul>	<p>Remarks</p> <p>A-95</p>	<p>Logged by</p> <p>J.O.</p>
			<p>Scale</p> <p>1:50</p>
			<p>Fig.</p>





Equipment & Methods. Rotary auger 150mm dia.	Location. NAIROBI BY-PASS
---	------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 30/7/90
---	--------------	-------------	-----------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type No	Test	
Medium and hard reddish brown SILTY CLAY.		X X		G.L. - 1.00	B1		
		X X	( 5.50 )	1.00 - 1.45	D1	S N = 6	
		X X		1.00 - 2.00	B2		
		X X		2.00 - 2.45	D2	S N = 7	
		X X		2.00 - 3.00	B3		
		X X		3.00 - 3.45	D3	S N > 50	
		X X		3.00 - 4.00	B4		
		X X		4.00 - 4.45	D4	S N = 32	
		X X		4.00 - 5.00	B5		
		X X		5.00 - 5.45	D5	S N > 50	
		X X		5.00 - 6.45	B6		
	Completely weathered orange brown TRACHYTE. (as sandy clayey silt)		V V V	( 0.95 )			
END OF BOREHOLE			6.45				

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation</p>	<p>Remarks</p> <p>A-96</p>	Logged by J.O.
			Scale 1:50
			Fig.





Equipment & Methods. Rotary auger 150mm dia. 6.0-7.45m. Rotary coring 191mm dia. 7.45-13.00m

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY

Ground Level

Coordinates

Date

29/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
		x x		G.L. - 1.00		B1	
		x x		1.00 - 1.45		D2	S N=6
		x x		1.00 - 2.00		B3	
		x x		2.00 - 2.45		D4	S N=16
		x x		2.00 - 3.00		B5	
		x x		3.00 - 3.45		D6	S N=12
		x x		3.00 - 4.00		B7	
		x x		4.00 - 4.45		D8	S N=12
		x x		4.00 - 5.00		B9	
		x x		5.00 - 5.45		D10	S N=30
		x x		5.00 - 6.00		B11	
		x x		6.00 - 6.45		D12	S N=48
		x x		6.00 - 7.00		B13	
		x x		7.00 - 7.45			S N=54
Completely weathered non intact light grey fine grained vesicular TRACHYTE.		VVVV	(7.45)	7.45 - 7.85			FI TCR RQD GRADE NI 100 0 V
Reddish brown SILTY CLAY.		x x		7.85 - 8.05			
Completely weathered orange brown TRACHYTE (as clayey silt)		VVVV	(1.95)	7.85 - 9.35			NI 96 0 V
		VVVV		9.35 - 10.85			NI 96 0

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column

W.R. L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.  
 D Disturbed sample  
 B Bulk sample  
 W Water sample  
 P Piston (P) Tube (U) or core sample length to scale  
 S Standard Penetration Test  
 V Vane Test  
 C Core recovery  
 r Rock Quality Designation (RQD - %)

Remarks  
 A-97

Logged by  
 J. O.  
 Scale  
 1:50  
 Fig.





Equipment & Methods. See Sheet 1	Location. NAIROBI BY-PASS
-------------------------------------	------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 29/7/90
---	--------------	-------------	-----------------

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records			
				Depth	Sample Type	Sample No	Test			
(as above)		VVVVV	(1.30)	9.35_10.85						V
Completely weathered orange brown TRACHYTE (as clayey silt)		VVVVV	(1.30)							
Reddish brown SILTY CLAY		----	(.45)	10.85_12.35				NI 100	0	-
Completely weathered non intact brown TRACHYTE.		VVVVV	(.60)							V
Reddish brown SILTY CLAY		----	(.65)	12.35_13.00				NI 100	0	-
END OF BOREHOLE			13.00							

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres. Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-98</p>	Logged by J. O.
			Scale 1:50
			Fig.







Equipment & Methods. Rotary auger 150mm dia. 0.0-3.00m, Rotary coring 101mm dia. 3.00-4.10m, Rotary auger 150mm dia. 4.10-7.90m, Rotary coring 101mm dia. 7.90-14.00m

Location.

NAIROBI BYPASS ROAD

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY

Ground Level

Coordinates

Date

24\_26/9/91

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Soft becoming stiff reddish brown SILTY CLAY. Dry soil.		X	G.L. - 1.00		B1		
		X	1.00 - 1.45		D2	S N = 5	
		X	1.50 - 2.00		B3		
		X	2.00 - 2.45		D4	S N = 16	
Very compact brown sandy CLAYEY SILT with weathered tuff zones and fragments and lateritic GRAVEL (φ0.3cm). (completely weathered tuff) Dry soil.	2.45	X	2.50 - 3.00		B5		
		X	3.00 - 3.15		D6	S (51) REFUSAL	F.I. TCR RQD GRADE NI 100 0 V
		X	3.00 - 4.10				
Orange brown mottled black nodular fine lateritic GRAVEL (φ0.3cm) in clay matrix.	5.05	O	4.10 - 4.55		D7	S N = 28	
	5.45	O	4.55 - 5.05		B8		
Hard reddish brown sandy SILTY CLAY with weathered tuff fragments.	5.50	O	5.05 - 5.50		D9	S N = 50	
		X	5.50 - 6.00		B10		
		X	6.00 - 6.40		D11	S (134) REFUSAL	
Highly becoming moderately weathered non intact brownish grey trachyte AGGLOMERATE of angular compact and finely vesicular trachyte fragments upto 6cm and pumice in thin altered fine grained matrix.	7.00	X	6.40 - 7.00		B12		
		X	7.00 - 7.35		D13	S (162) REFUSAL	F.I. TCR RQD GRADE NI 100 0 IV
		X	7.30 - 8.00				III
See Sheet 2	8.75	V	8.00 - 8.40				
		V	8.40 - 10.00			17 100 8	IV

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)  
 DEPTHS: All depths and reduced levels in metres  
 Thickness given in brackets in depth column  
 W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key:  
 D Disturbed sample  
 B Bulk sample  
 W Water sample  
 P Piston (P) Tube (U) or core sample length to scale  
 S Standard Penetration Test  
 V Vane Test  
 C Core recovery  
 r Rock Quality Designation

Remarks  
 A-99

Logged by  
 J. O.  
 Scale  
 1:50  
 Fig. 2





Equipment & Methods. See Sheet 1	Location. NAIROBI BYPASS ROAD
-------------------------------------	----------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 24_26/9/91
---	--------------	-------------	--------------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records			
				Depth	Sample		Test	No	Remarks	
					Type	No				
<p>Highly weathered with very closely and closely spaced fractures partly non intact grey with green tinge fine grained TRACHYTE with occasional less weathered zone upto 15cm.</p> <p>Fractures subhorizontal rarely medium steep and steep rough clay filled with fracture surfaces black iron oxide coated.</p>		vvvvvv	(4.00)	10.00_11.50			12	100	7	
		vvvvvv		11.50_13.00			10	100	0	IV
		vvvvvv		13.00_14.00			NI	100	0	

END OF B/H.

DATE	TIME	DEPTH (M)			REMARKS
		HOLE	CASING	W.R.L.	
24/9/91	18.00	4.10	3.00	0.50	
25/9/91	7.00	4.10	3.00	DRY	
	18.00	8.40	7.50	1.10	
26/9/91	7.30	8.40	7.50	2.50	
	13.15	14.00	7.50	2.10	

--	--	--	--

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-100</p>	Logged by J. O.
			Scale 1:50
			Fig 2





Equipment & Methods. Rotary auger 150mm dia.  
0.1-1.00m. Rotary coring 101mm dia. 1.00-5.20m

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level

Coordinates

Date

25\_26/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records						
				Depth	Sample Type	Test No	Test	FI	TCR	RQD	GRADE		
Dark grey CLAY.			(1.00)	G.L. - 1.00		B1							
Highly weathered non intact grey phonolitic AGGLOMERATE of angular phonolite fragments upto 15cm in fine grained matrix. Fractures 0° black clay filled.	0°		(1.10)	1.00 - 1.50						NI	100	0	IV
	0°		(2.10)	1.50 - 3.00						3	100	33	
Moderately weathered grey with brown patches phonolitic AGGLOMERATE of angular compact and vesicular phonolite fragments upto boulder size in fine grained matrix. Fractures subhorizontal rough clay filled.	0° 0° 0° 20° 30°		(3.10)	3.00 - 4.40						6	100	35	III
			(5.20)	4.40 - 5.20						3	100	32	
END OF BOREHOLE													

DATE	TIME	DEPTH (M)			REMARKS
		HOLE	CASING	W.R.L.	
25/7/90	13.00	NIL	NIL	DRY	
	18.00	3.00	1.00	1.10	
26/7/90	7.00	3.00	1.00	1.00	
	18.00	5.20	NIL	2.10	

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)  
 DEPTHS: All depths and reduced levels in metres  
 Thickness given in brackets in depth column  
 W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.  
 D Disturbed sample  
 B Bulk sample  
 W Water sample  
 P Piston (P) Tube (U) or core sample length to scale  
 S Standard Penetration Test  
 V Vane Test  
 C Core recovery  
 f Rock Quality Designation

Remarks  
 A-101

Logged by  
 J. O.  
 Scale  
 1:50  
 Fig.





Equipment & Methods. Rotary auger 150mm dia. 0.5-0.50m. Rotary coring 101mm dia. 0.50-5.00m

Location. NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY

Ground Level Coordinates Date 25/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records							
				Depth	Sample Type	Test No	Test	E.I.	TCR	RQD	GRADE			
Dark grey CLAY			(0.70)	G.L. - 0.50		B1								
Moderately weathered with medium spaced fractures grey with brown patches phonolitic AGGLOMERATE of angular vesicular and compact phonolite fragments upto boulder size in fine grained matrix.  Fractures subhorizontal rough limonite coated.	20°		0.70	0.50 - 2.00	↓			6	100	29				
	0°													
	0°													
	10°		(4.30)	2.00 - 3.50	↓			4	100	52	III			
	0°													
	0°			3.50 - 5.00	↓			6	100	50				
	0°													

END OF BOREHOLE

DATE	TIME	DEPTH (M)			REMARKS
		HOLE	CASING	W.R.L.	
25/7/90	7.00	0.00	NIL	DRY	
	18.00	5.00	NIL	2.00	

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)  
 DEPTHS: All depths and reduced levels in metres  
 Thickness given in brackets in depth column  
 W.R.L: Water level observations during boring are given on the test sheet of log.

Sample / Test Key.  
 D Disturbed sample  
 B Bulk sample  
 W Water sample  
 P Piston (P) Tube (U) or core sample length to scale  
 S Standard Penetration Test  
 V Vane Test  
 C Core recovery  
 r Best Quality Designation

Remarks A-102

Logged by J.O.  
 Scale 1:50  
 Fig.







Equipment & Methods: Rotary auger 150mm dia. G.L.-5.00m Location: NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY Ground Level Coordinates Date 23-24/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type No	Test	
Hard grey CLAY			(2.00)	G.L. - 1.00	B1		
				1.00 - 1.45	D2	N <sup>S</sup> = 54	
				1.00 - 2.00	B3		
Hard brown CLAY			(3.00)	2.00 - 2.45	D4	N <sup>S</sup> = 50	
				2.00 - 3.00	B5		
				3.00 - 3.45	D6	N <sup>S</sup> = 53	
				3.00 - 4.00	B7		
Completely weathered orange brown TUFF.		△	(45) 5.00	4.00 - 4.45	D8	N <sup>S</sup> = 29	
			5.45	4.00 - 5.00	B9		
END OF BOREHOLE				5.00 - 5.45	D10	N <sup>S</sup> = 47	

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the test sheet of log.</p>	<p>Sample / Test Key.</p> <ul style="list-style-type: none"> <li>D Disturbed sample</li> <li>B Bulk sample</li> <li>W Water sample</li> <li>P Piston (P) Tube (U) or core sample length to scale</li> <li>S<sub>0</sub> Standard Penetration Test</li> <li>V Vane Test</li> <li>C Core recovery</li> <li>r Rock Quality Designation (RQD - %)</li> </ul>	<p>Remarks</p> <p>A-103</p>	<p>Logged by</p> <p>J. O.</p>
			<p>Scale</p> <p>1:50</p>
			<p>Fig.</p>





Equipment & Methods. Rotary auger 150mm dia.  
G.L. to 10.40m

Location. NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY

Ground Level Coordinates Date  
30,31/7-1/8/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample		
					Type	No	
Soft to firm reddish brown SILTY CLAY.		x . x	(6.00)	G.L. - 1.00		B1	
		x . x		1.00 - 1.45	D2		S N = 8
		x . x		1.00 - 2.00	B3		
		x . x		2.00 - 2.45	D4		S N = 7
		x . x		2.00 - 3.00	B5		
		x . x		3.00 - 3.45	D6		S N = 4
		x . x		3.00 - 4.00	B7		
		x . x		4.00 - 4.45	D8		S N = 4
		x . x		4.00 - 5.00	B9		
		x . x		5.00 - 5.45	D10		S N = 4
Completely weathered orange brown TRACHYTE. (as sandy clay trace sand)		V . V	(4.00)	6.00 - 6.45		D12	S N = 4
		V . V		6.00 - 7.00	B13		
		V . V		7.00 - 7.45	D14		S N = 15
		V . V		7.00 - 8.00	B15		
		V . V		8.00 - 8.45	D16		S N = 25
		V . V		8.00 - 9.00	B17		
		V . V		9.00 - 9.45	D18		S N = 35
		V . V		9.00 - 10.00	B19		
		V . V					

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres. Thickness given in brackets in depth column

W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.

- D Disturbed sample
- B Bulk sample
- W Water sample
- P Piston (P) Tube (U) or core sample length to scale
- S Standard Penetration Test
- V Vane Test
- C Core recovery
- r Rock Quality Designation (RQD - %)

Remarks

A-104

Logged by J.O.

Scale 1:50

Fig.





Equipment & Methods. See Sheet 1	Location. NAIROBI BY-PASS
-------------------------------------	------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 30/3/77 - 1/8/90
---	--------------	-------------	--------------------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type No	Test	
(as above)  Completely weathered orange brown TRACHYTE. (as sandy clay trace sand)		V V V V	(6.00)	10.00-10.45	D20	S N=30	
		V V		10.00-11.00	B21		
		V V V V		11.00-11.45	D22	S N=32	
		V V		11.00-12.00	B23		
		V V V V		12.00-12.45	D24	S N=20	
		V V		12.00-13.00	B25		
		V V V V		13.00-13.45	D26	S N=41	
		V V		13.00-14.00	B27		
		V V V V		14.00-14.45	D28	S N=39	
		V V		14.00-15.00	B29		
		V V V V		15.00-15.45	D30	S N=23	
		V V		15.00-16.00	B31		
Hithly weathered grey TRACHYTE.		V V V	16.00				
		V V V	(45)	16.00-16.45	D32	S N=63	
END OF BOREHOLE		V V V	16.45				

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the test sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (R00 - V6)</p>	<p>Remarks</p> <p>A-105</p>	Logged by J. O.
			Scale 1:50
			Fig.





Equipment & Methods. Pick/Shovel hand tools excavation G.L-0.80m	Location. <b>NAIROBI BY-PASS</b>
--	-------------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 25/7/90
---	--------------	-------------	-----------------

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	Test No	
Reddish brown SILTY CLAY.		X	0.40				
Reddish brown mottled black concretionary lateritic GRAVEL.		o	0.70				
Moderately weathered altered brown fine grained TRACHYTE.		V	0.80				
END OF TRIAL PIT							

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-106</p>	Logged by J. O.
			Scale 1:50
			Fig.







Equipment & Methods: Pick/Shovel hand tools excavation G.L-0.85m Location: NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY Ground Level Coordinates Date 25/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	Test No	
Reddish brown silty CLAY with lateritic gravel.		○	0.20				
Orange brown mottled black fine to coarse lateritic GRAVEL. Water level 0.20m		○	0.85				
END OF TRIAL PIT							

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the test sheet of log.</p>	<p>Sample / Test Key.</p> <ul style="list-style-type: none"> <li>D Disturbed sample</li> <li>B Bulk sample</li> <li>W Water sample</li> <li>P Piston (P) Tube (U) or core sample length to scale</li> <li>S Standard Penetration Test</li> <li>V Vane Test</li> <li>C Core recovery</li> <li>r Rock Quality Designation (RQD - %)</li> </ul>	<p>Remarks</p> <p style="text-align: right;">A-107</p>	<p>Logged by</p> <p style="text-align: center;">J. O.</p>
			<p>Scale</p> <p style="text-align: center;">1:50</p>
			<p>Fig.</p>





Equipment & Methods. Pick/shovel hand tools  
excavation G.L.=0.70m

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level

Coordinates

Date

25/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample		
					Type	No	
Orange brown/black nodular lateritic GRAVEL.			0.15				
Moderately weathered light grey agglomeratic TUFF of subangular greenish grey pumice fragments upto 5cm in fine grained matrix.			0.70				
END OF TRIAL PIT							

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres  
Thickness given in brackets in depth column

W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.

- D Disturbed sample
- B Bulk sample
- W Water sample
- P Piston (P) Tube (U) or core sample length to scale
- S Standard Penetration Test
- V Vane Test
- C Core recovery
- R Rock Quality Designation (RQD - %)

Remarks

A-108

Logged by  
J.O.

Scale  
1:50

Fig.









# Mowlem Construction Co. Ltd.

Borehole No. TC 5  
Sheet 1 of 1

Equipment & Methods: Pick/shovel hand tools excavation G.L.-1.10m	Location: <b>NAIROBI BY-PASS</b>
--	-------------------------------------

Carried out for: <b>JAPAN INTERNATIONAL COOPERATION AGENCY</b>	Ground Level	Coordinates	Date <b>25/7/90</b>
--	--------------	-------------	------------------------

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type No	Test	
Reddish brown SILTY CLAY.		x x					
As above with tuff cobbles.		x x	0.60				
Moderately weathered light brown agglomeratic TUFF.		800	1.10				
END OF TRIAL PIT							

<p><b>S.P.T.:</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p><b>DEPTHS:</b> All depths and reduced levels in metres. Thickness given in brackets in depth column</p> <p><b>W.R.L.:</b> Water level observations during boring are given on the last sheet of log.</p>	<p><b>Sample / Test Key:</b></p> <ul style="list-style-type: none"> <li>D Disturbed sample</li> <li>B Bulk sample</li> <li>W Water sample</li> <li>— Piston (P) Tube (U) or core sample length to scale</li> <li>S Standard Penetration Test</li> <li>V Vane Test</li> <li>C Core recovery</li> <li>r Rock Quality Designation (RQD - %)</li> </ul>	<p><b>Remarks</b></p> <p style="text-align: center;">A-110</p>	<p><b>Logged by</b></p> <p style="text-align: center;">J. O.</p> <p><b>Scale</b></p> <p style="text-align: center;">1:50</p> <p><b>Fig.</b></p>
---	---	--	---







Equipment & Methods: Pick/Shovel hand tools excavation G.L.-1.70m  
Location: NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY  
Ground Level Coordinates Date: 25/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Top soil to 0.2m. Reddish brown SILTY CLAY.		x x x x x x x x x x x	1.70				
END OF TRIAL PIT							

<p>S.P.T: Where full 0.3 m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres. Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation</p>	<p>Remarks</p> <p>A-111</p>	<p>Logged by</p> <p>J. O.</p>
			<p>Scale</p> <p>1:50</p>
			<p>Fig.</p>





Equipment & Methods: Pick/Shovel hand tools excavation G.L.-2.00m	Location: <b>NAIROBI BY-PASS</b>
--	-------------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 25/7/90
--	--------------	-------------	-----------------

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type No	Test	
Top soil to 0.25m. Reddish brown SILTY CLAY.		x x x x x x x x x x x x	2.00				
END OF TRIAL PIT							

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>v Vane Test</p> <p>C Core recovery</p> <p>r (Quality Designation)</p>	<p>Remarks</p> <p>A-112</p>	Logged by J. O.
			Scale 1:50
			Fig.





Equipment & Methods. Pick/Shovel hand tools excavation G.L.-0.70m Location. NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY Ground Level Coordinates Date 25/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Top soil to 0.15m. Grey SILTY CLAY.		x x x	0.50				
Moderately weathered light grey with dark grey pumice inclusions agglomeratic TUFF.		x x x	0.70				
END OF TRIAL PIT							

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation</p>	<p>Remarks</p> <p>A-113</p>	Logged by
			J.O.
			Scale
			1:50
			Fig.





Equipment & Methods. Pick/Shovel hand tools  
excavation G.L. 1.40m

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level

Coordinates

Date

25/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Top soil to 0.2m. Grey humic SILTY CLAY.		x x	0.40				
Reddish brown SILTY CLAY with gravel.		x o x	1.10				
Brown in situ tuff GRAVEL.		o o x x	1.40				
Highly weathered non intact brown agglomeratic TUFF.		o o o o o o					
END OF TRIAL PIT							

S.P.T. Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres  
Thickness given in brackets in depth column

W.R.L.: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.  
 D Disturbed sample  
 B Bulk sample  
 W Water sample  
 P Piston (P) Tube (U) or core sample length to scale  
 S Standard Penetration Test  
 V Vane Test  
 C Core recovery  
 R Rock Quality Designation (RQD - %)

Remarks

A-114

Logged by  
J. O.  
Scale  
1:50  
Fig.







Equipment & Methods. Pick/shovel hand tools  
excavation 8.1-0.50m

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Location.  
NAIROBI BY-PASS

Ground Level Coordinates Date  
25/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	Test No	
Top soil to 0.1m. Light grey CLAY.			0.50				
Moderately weathered pyroclastic TUFF with greenish grey pumice inclusions upto 5cm.							
END OF TRIAL PIT							

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres. Thickness given in brackets in depth column

W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.  
 D Disturbed sample  
 B Bulk sample  
 W Water sample  
 P Piston (P) Tube (U) or core sample length to scale  
 S Standard Penetration Test  
 V Vane Test  
 C Core recovery  
 r Rock Quality Designation

Remarks  
A-115

Logged by  
J. O.  
Scale  
1:50  
Fig.





Equipment & Methods. Pick/shovel hand tools  
excavation G.L-2.00m

Location.  
NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level Coordinates Date  
25/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Top soil to 0.2m. Reddish brown SILTY CLAY with gravel.		X . X X . X X . X X . X X . X X . X X . X X . X X . X	2.00				
END OF TRIAL PIT							

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)  
DEPTHS: All depths and reduced levels in metres  
Thickness given in brackets in depth column  
W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.  
D Disturbed sample  
B Bulk sample  
W Water sample  
P Piston (P) Tube (U) or core sample length to scale  
S Standard Penetration Test  
V Vane Test  
C Core recovery  
r Rock Quality Designation (RQD) (%)

Remarks  
A-116

Logged by  
J. O.  
Scale  
1:50  
Fig.





Equipment & Methods: Pick/Shovel hand tools excavation 0.1-0.70m	Location: <b>NAIROBI BY-PASS</b>
---	-------------------------------------

Carried out for: <b>JAPAN INTERNATIONAL COOPERATION AGENCY</b>	Ground Level	Coordinates	Date <b>25/7/90</b>
--	--------------	-------------	------------------------

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type No	Test	
Top soil to 0.1m. Reddish brown SILTY CLAY.		X . X					
		X . X					
		X . X					
		X . X					
		X . X					
		X . X					
		X . X					
		X . X					
		X . X					
		X . X					
		X . X					
		X . X					
		X . X					
		X . X					
Reddish brown SILTY CLAY with gravel.		X O X O	3.20				
		X O X O					
		X O X O	3.70				
		X O X O					
END OF TRIAL PIT							

<p><b>S.P.T.:</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p><b>DEPTHS:</b> All depths and reduced levels in metres. Thickness given in brackets in depth column</p> <p><b>W.R.L.:</b> Water level observations during boring are given on the last sheet of log.</p>	<p><b>Sample / Test Key.</b>  D Disturbed sample  ■ Bulk sample  W Water sample  P Piston (P) Tube (U) or core sample length to scale  S Standard Penetration Test  V Vane Test  C Core recovery  F <b>Rock Quality Designation</b>  (800 - 7)</p>	<p>Remarks</p> <p style="text-align: right;">A-117</p>	Logged by
			J. O.
			Scale 1:50
			Fig.





Mowlem Construction Co. Ltd.

Borehole No. TC 13  
Sheet 1 of 1

Equipment & Methods: Pick/Shovel hand tools excavation G.L-4.00m  
Location: NAIROBI BY - PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY  
Ground Level Coordinates Date: 27/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Sample No	
Top soil to 0.2m. Reddish brown SILTY CLAY. With black ferruginous spots in lower zone 2.20-4.00m.		x . x x . x x . x x . x x . x x . x x . x x . x x . x x . x x . x x . x x . x	4.00				
END OF TRIAL PIT							

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the test sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-118</p>	Logged by J. O.
			Scale 1:50
			Fig.







Equipment & Methods. Pick/shovel hand tools excavation 0.1-0.70m	Location. NAIROBI BY-PASS
--	------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 27/7/90
---	--------------	-------------	-----------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Top soil to 0.05m. Grey SILTY CLAY (Black cotton soil).		X	0.40				
Orange brown/black lateritic GRAVEL.		X	0.70				
END OF TRIAL PIT							

<p>S.P.T.: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L.: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>R Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-119</p>	Logged by J. O.
			Scale 1:50
			Fig.









Equipment & Methods: Pick/Shovel hand tools  
excavation G.L.-2.00m

Location:

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level

Coordinates

Date

27/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	Test No	
Top soil to 0.3m. Reddish brown SILTY CLAY.		Δ . X - X x . x - x X . x - x x . x - x x . x - x	2.00				
END OF TRIAL PIT							

S.P.T.: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)  
DEPTHS: All depths and reduced levels in metres  
Thickness given in brackets in depth column  
W.R.L.: Water level observations during boring are given on the last sheet of log.

Sample / Test Key:  
D Disturbed sample  
B Bulk sample  
W Water sample  
P Piston (P) Tube (U) or core sample length to scale  
S Standard Penetration Test  
V Vane Test  
C Cone recovery  
r Rock Quality Designation (RQD - %)

Remarks  
A-121

Logged by  
J. O.  
Scale  
1:50  
Fig.





Equipment & Methods. Pick/Shovel hand tools excavation S.L-3.70m	Location. <b>NAIROBI BY-PASS</b>		
Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date <b>27/7/90</b>

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	No	
Top soil to 0.3m. Reddish brown SILTY CLAY.		X X					
Highly weathered altered brown fine and medium grained TUFF with subangular pumice inclusions upto 2cm, rare lava upto 1cm.		X X					
		X X	3.60 3.70				
END OF TRIAL PIT							

<p><b>S.P.T:</b> Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p><b>DEPTHS:</b> All depths and reduced levels in metres. Thickness given in brackets in depth column</p> <p><b>W.R.L:</b> Water level observations during boring are given on the last sheet of log.</p>	<p><b>Sample / Test Key.</b>            D Disturbed sample            B Bulk sample            W Water sample            P Piston (P) Tube (U) or core sample length to scale            S Standard Penetration Test            V Vane Test            C Core recovery            R Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-122</p>	Logged by J.O.
			Scale 1:50
			Fig.







Equipment & Methods. Pick/Shovel hand tools excavation G.L-2.25m	Location. NAIROBI BY-PASS
---	------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 27/7/90
--	--------------	-------------	-----------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Top soil to 0.3m. Reddish brown SILTY CLAY.		x x x x x x x x x x x x x x x x x x					
END OF TRIAL PIT			2.25				

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres. Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-123</p>	Logged by J. O.
			Scale 1:50
			Fig.





Equipment & Methods. Pick/shovel hand tools excavation G.L.-2.10m	Location. NAIROBI BY-PASS
--	------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 27/7/90
--	--------------	-------------	-----------------

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	Test No	
Top soil to 0.3m. Reddish brown SILTY CLAY with black spots in bottom zone.		X X X X X X X X X X X X X X X X	2.10				
END OF TRIAL PIT							

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (RQD) - %</p>	<p>Remarks</p> <p>A-124</p>	Logged by J.O.
			Scale 1:50
			Fig.





Equipment & Methods. Pick/Shovel hand tools excavation G.L-2.20m	Location. <b>NAIROBI BY-PASS</b>
---	-------------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date <b>27/7/90</b>
--	--------------	-------------	------------------------

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample		
					Type	No	
Top soil to 0.25m. Reddish brown SILTY CLAY with black ferruginous spots in bottom zone.		X X X X X X X X X X X X X X X X X X	2.20				
END OF TRIAL PIT							

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>R Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-125</p>	Logged by J.O.
			Scale 1:50
			Fig.





Equipment & Methods. Pick/Shovel hand tools excavation G.L-1.90m	Location. NAIROBI BY-PASS
---	------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 27/7/90
--	--------------	-------------	-----------------

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records	
				Depth	Sample			Test
					Type	No		
Top soil to 0.3m. Reddish brown SILTY CLAY with black ferruginous impregnation in bottom zone.		X . X X . X X . X X . X X . X X . X X . X X . X	1.90					
END OF TRIAL PIT								

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation</p>	<p>Remarks</p> <p>A-126</p>	Logged by J. O.
			Scale 1:50
			Fig.







Equipment & Methods: Pick/shovel hand tools  
excavation G.L.-3.50m

Location: NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY

Ground Level Coordinates Date  
27/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Top soil to 0.4m. Reddish brown SILTY CLAY.		x x x x x x x x x x x x x x x x x x x x					
Completely weathered light grey with green tinge altered fine grained TRACHYTE.		v v v v v v v v v	3.30 3.70				
END OF TRIAL PIT							

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)  
DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column  
W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.  
D Disturbed sample  
B Bulk sample  
W Water sample  
P Piston (P) Tube (U) or core sample length to scale  
S Standard Penetration Test  
V Vane Test  
C Core recovery  
R Rock Quality Designation (RQD - %)

Remarks  
A-127

Logged by  
J. O.  
Scale  
1:50  
Fig.





Equipment & Methods. Pick/Shovel hand tools excavation G.L.-2.80m  
Location. NAIROBI BY - PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY  
Ground Level Coordinates Date 27/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample		
					Type	No	
Reddish brown SILTY CLAY.		X X					
Completely weathered light grey fine grained porphyritic TRACHYTE.		X X	2.70 2.80				
END OF TRIAL PIT							

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)  
DEPTHS: All depths and reduced levels in metres  
Thickness given in brackets in depth column  
W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.  
D Disturbed sample  
B Bulk sample  
W Water sample  
P Piston (P) Tube (U) or core sample length to scale  
S Standard Penetration Test  
V Vane Test  
C Core recovery  
r Rock Quality Designation

Remarks A-128

Logged by J.O.  
Scale 1:50  
Fig.





# Mowlem Construction Co. Ltd.

Borehole No. TC 24  
Sheet 1 of 1

Equipment & Methods. Pick/Shovel hand tools  
excavation G.L-2.10m

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level

Coordinates

Date

27/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	Test No	
Top soil to 0.25m. Reddish brown SILTY CLAY.		X . X X . X X . X X . X X . X X . X X . X X . X X . X	2.10				
END OF TRIAL PIT							

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres  
Thickness given in brackets in depth column

W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.

- D Disturbed sample
- B Bulk sample
- W Water sample
- P Piston (P) Tube (U) or core sample length to scale
- S Standard Penetration Test
- V Vane Test
- C Core recovery
- R Rock Quality Designation

Remarks

A-129

Logged by  
J.O.

Scale  
1:50

Fig.





Equipment & Methods. Pick/shovel hand tools excavation 0.4-1.20m	Location. NAIROBI BY-PASS
--	------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 27/7/90
---	--------------	-------------	-----------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records										
				Depth	Sample Type	Test No											
Colluvial deposit to 0.4m. Reddish brown SILTY CLAY.		<table border="1"> <tr><td>X</td><td>X</td></tr> <tr><td>X</td><td>X</td></tr> <tr><td>X</td><td>X</td></tr> <tr><td>X</td><td>X</td></tr> <tr><td>X</td><td>X</td></tr> </table>	X	X	X	X	X	X	X	X	X	X	1.20				
X	X																
X	X																
X	X																
X	X																
X	X																
END OF TRIAL PIT																	

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key:</p> <ul style="list-style-type: none"> <li>D Disturbed sample</li> <li>B Bulk sample</li> <li>W Water sample</li> <li>P Piston (P) Tube (U) or core sample length to scale</li> <li>S Standard Penetration Test</li> <li>V Vane Test</li> <li>C Core recovery</li> <li>r Rock Quality Designation (RQD - %)</li> </ul>	<p>Remarks</p> <p>A-130</p>	<p>Logged by J.O.</p> <p>Scale 1:50</p> <p>Fig.</p>
---	--	-----------------------------	---







Equipment & Methods. Pick/shovel hand tools excavation G.L-1.40m	Location. <b>NAIROBI BY-PASS</b>
--	-------------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date <b>27/7/90</b>
---	--------------	-------------	------------------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
light brown GRAVEL of trachyte fragments in silty clay matrix (fill).		o o o o	0.20				
Top soil		x x x	0.40				
Reddish brown SILTY CLAY.		x x x	1.40				
END OF TRIAL PIT							

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given. (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-131</p>	Logged by J.O.
			Scale 1:50
			Fig.





Equipment & Methods: Pick/Shovel hand tools  
excavation G.L.-1.10m

Location:  
**NAIROBI BY-PASS**

Carried out for: **JAPAN INTERNATIONAL COOPERATION AGENCY**

Ground Level Coordinates Date  
**27/7/90**

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample		
					Type	No	
Light brown GRAVEL of trachyte fragments in silty clay matrix.		o o o o o o	0.30				
Reddish brown with grey patches SILTY CLAY with root fibres (fill).		x x x x	0.80				
Reddish brown SILTY CLAY.		x x x x	1.10				
END OF TRIAL PIT							

S.P.T.: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)  
 DEPTHS: All depths and reduced levels in metres  
 Thickness given in brackets in depth column  
 W.R.L.: Water level observations during boring are given on the last sheet of log.

Sample / Test Key:  
 D Disturbed sample  
 B Bulk sample  
 W Water sample  
 P Piston (P) Tube (U) or core sample length to scale  
 S Standard Penetration Test  
 V Vane Test  
 C Core recovery  
 r Rock Quality Designation

Remarks  
 A-132

Logged by  
 J. O.  
 Scale  
 1:50  
 Fig.





Equipment & Methods. Pick/Shovel hand tools  
excavation 6, L-1, 10m

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level

Coordinates

Date

27/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	Test No	
Brown gravelly SILTY CLAY, occasional trachyte cobbles.		x	0.30				
Reddish brown SILTY CLAY with some fine gravel (fill).		x	0.50				
Reddish brown SILTY CLAY (fill).		x	1.10				
END OF TRIAL PIT							

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres. Thickness given in brackets in depth column

W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.

- D Disturbed sample
- B Bulk sample
- W Water sample
- P Piston (P) Tube (U) or core sample length to scale
- S Standard Penetration Test
- V Vane Test
- C Core recovery
- r Rock Quality Designation

Remarks

A-133

Logged by

J. O.

Scale

1:50

Fig.











Equipment & Methods. Pick/shovel hand tools excavation G.L. 1.00m	Location. NAIROBI BY-PASS
---	------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 27/7/90
---	--------------	-------------	-----------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Top soil to 0.3m. Reddish brown SILTY CLAY.		x x x x x x	1.00				
END OF TRIAL PIT							

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres. Thickness given in brackets in depth column.</p> <p>W.R.L.: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-135</p>	Logged by J.O.
			Scale 1:50
			Fig.





Equipment & Methods. Pick/shovel hand tools excavation 2.1-2.70m	Location. <b>NAIROBI BYPASS ROAD</b>
--	---

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 23_26/9/91
---	--------------	-------------	--------------------

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	Test No	
Reddish brown SILTY CLAY with root fibres in upper zone. Dry soil, Dug by pickaxe and scooped by shovel.		X	(1.60)	1.00 - 1.30	B1		
Reddish brown mottled black nodular fine lateritic GRAVEL (φ0.3cm). Dry soil, Dug by pickaxe.		○	1.60 - 2.10				
Highly weathered light brownish grey agglomeratic TUFF. Dug by pickaxe.		△	2.10 - 2.70	2.50 - 2.70	B2		

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres. Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>▬ Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation</p>	<p>Remarks</p> <p>A-136</p>	Logged by J.O.
			Scale 1:50
			Fig 3





Equipment & Methods: Pick/shovel hand tests  
excavation 0.L-3.40m

Location:

NAIROBI BYPASS ROAD

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level

Coordinates

Date

23\_26/9/91

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	Test No	
Reddish brown SILTY CLAY with root fibres in upper zone and black ferruginous impregnation in lower zone. Dry soil, Dug by pickaxe and scooped by shovel.		X	(2.40)	1.80-2.20	B1		
Reddish brown mottled black nodular fine lateritic GRAVEL. Dry soil, Dug by pickaxe.		o	2.40-2.60				
Reddish brown SILTY CLAY with tuff gravel. Gravel is completely weathered light brown tuff as in situ. Dry soil, Dug by pickaxe.		Δ	3.00-3.40		B2		

S.P.T.: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column

W.R.L.: Water level observations during boring are given on the last sheet of log.

Sample / Test Key

- D Disturbed sample
- B Bulk sample
- W Water sample
- P Piston (P) Tube (U) or core sample length to scale
- S Standard Penetration Test
- V Vane Test
- C Core recovery
- r Rock Quality Designation (RQD - %)

Remarks

A-137

Logged by  
J.O.

Scale  
1:50

Fig 4





Equipment & Methods. Pick/shovel hand tools excavation @ L-1.00m Location. NAIROBI BYPASS ROAD

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY Ground Level Coordinates Date 23\_26/9/91

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample		
					Type	No	
Light grey CLAY with grass roots top 0.30m. Crack grew, Dry soil, Dug by pickaxe.		---	(0.70)	0.40_0.70	↑	B1	Block sample
		---	0.70	0.40_0.70	↓	B2	
Highly weathered light grey pyroclastic TUFF. Becoming slightly weathered at bottom. Dug by pickaxe.		△	1.00	0.80_1.00	↑	B2	

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>⊕ Bulk sample</p> <p>W Water sample</p> <p>▬ Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Test Quality Designation</p>	<p>Remarks</p> <p>A-138</p>	<p>Logged by</p> <p>J.O.</p>
			<p>Scale</p> <p>1:50</p>
			<p>Fig. 5</p>







Equipment & Methods. Pick/shovel hand tools excavation G.L.-1.50m	Location. NAIROBI BYPASS ROAD
---	----------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 23.26/9/91
---	--------------	-------------	--------------------

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type No	Test	
Grey CLAY with abundant root fibres top 20cm becoming rare downward. Crack grey, Dug by pickaxe.			0.20-0.50 0.30-0.80 0.90		B2	Block	sample
Orange mottled black nodular fine lateritic GRAVEL ( $\phi$ 0.2~0.3cm). Dug by pickaxe.			1.40				
Highly weathered light grey Pyroclastic TUFF of angular dark grey pumice inclusions upto 3cm in fine grained matrix. Dug by pickaxe.			1.50				

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>■ Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-139</p>	Logged by J. O.
			Scale 1:50
			Fig. 6





# Mowlem Construction Co. (E.A.) Ltd.

Borehole No. TC35  
Sheet 1 of 1

Equipment & Methods. Pick/shovel hand tools excavation 4.0L-7.30m	Location. <b>NAIROBI BYPASS ROAD</b>
---	---

Carried out for: <b>JAPAN INTERNATIONAL COOPERATION AGENCY</b>	Ground Level	Coordinates	Date <b>23.26/9/91</b>
--	--------------	-------------	---------------------------

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	Test No	
Reddish brown SILTY CLAY with root fibres in upper zone. Dry soil, Dug by pickaxe and Scooped by shovel.		x	(1.30)				
		x	1.30	1.00-1.30	B1		

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value) DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column W.R.L: Water level observations during boring are given on the last sheet of log.	<b>Sample / Test Key.</b> D Disturbed sample B Bulk sample W Water sample P Piston (P) Tube (U) or core sample length to scale S Standard Penetration Test V Vane Test C Core recovery r Rock Quality Designation	Remarks  A-140	Logged by <b>J. O.</b>
			Scale <b>1:50</b>
			Fig <b>7</b>





Equipment & Methods. Pick/shovel hand tools excavation 6.L-4.20m	Location. <b>NAIROBI BYPASS ROAD</b>
--	---

Carried out for: <b>JAPAN INTERNATIONAL COOPERATION AGENCY</b>	Ground Level	Coordinates	Date <b>23.26/9/91</b>
--	--------------	-------------	---------------------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Reddish brown with grey humus SILTY CLAY with root fibres.		X	0.20				
Reddish brown SILTY CLAY with occasional roots. Dry soil, Dug by pickaxe and Scooped by shovel.		X	(1.50)				
Reddish brown with black ferruginous impregnation SILTY CLAY. contain lateritic GRAVEL ( $\phi 0.2 \sim 0.3\text{cm}$ ) in 2.9~3.8m depth. Dry soil, Dug by pickaxe.		X	(2.10)	2.90 - 3.20	B1		
Highly weathered light yellowish brown pyroclastic TUFF, with black ferruginous staining. Dug by pickaxe.		X	(4.20)	4.00 - 4.20	B2		

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (RQD) (%)</p>	<p>Remarks</p> <p>A-141</p>	Logged by <b>J. O.</b>
			Scale <b>1:50</b>
			Fig. <b>8</b>





Equipment & Methods. Pick/shovel hand tools excavation G.L. -1.00m	Location. NAIROBI BYPASS ROAD
--	----------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 23.26/9/91
---	--------------	-------------	--------------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type No	Test	
Light grey CLAY with root fibres. crack grew. Dug by pickaxe.		.....	0.20-0.40	0.20-0.40	↑ B2	Block	sample
Orange brown mottled back nodular. fine lateritic GRAVEL (φ0.2~0.3cm).		o o o o	0.90				
Highly weathered light grey Pyroclastic TUFF of dark grey pumice inclusions upto 1cm in fine grained matrix. Slightly weathered at bottem.			1.00				

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>▬ Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-142</p>	Logged by J.O.
			Scale 1:50
			Fig 9







Equipment & Methods: Pick/Shovel hand tools  
excavation 0.L-1.10m

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level

Coordinates

Date

25/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Dark grey CLAY (Black cotton soil).		x	0.70				
Highly weathered non intact greyish brown phenolitic AGGLOMERATE.		(stippled pattern)	1.10				
END OF TRIAL PIT							

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres  
Thickness given in brackets in depth column

W.R.L: Water level observations during boring are given on the test sheet of log.

Sample / Test Key.

- D Disturbed sample
- B Bulk sample
- W Water sample
- P Piston (P) Tube (U) or core sample length to scale
- S Standard Penetration Test
- V Vane Test
- C Core recovery
- r Rock Quality Designation

Remarks

A-143

Logged by

J. O.

Scale

1:50

Fig.





Equipment & Methods. Pick/Shovel hand tools excavation 0.6-1.90m	Location. NAIROBI BY PASS
--	------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 25/7/90
---	--------------	-------------	-----------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Dark grey slightly silty CLAY with rare lava fragments upto 10cm(fill)		X					
Dark grey CLAY, trace gravel. (Black cotton soil).		X	1.20				
Highly weathered vesicular grey phenolitic AGGLOMERATE.		X	1.80 1.90				
END OF TRIAL PIT							

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-144</p>	Logged by J.O.
			Scale 1:50
			Fig.





Equipment & Methods. Pick/shovel hand tools excavation 0.1-1.50m	Location. NAIROBI BY-PASS
--	---------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 25/7/90
---	--------------	-------------	--------------

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	Test No	
Grey SILTY CLAY with some fine and medium gravel (fill).		X	0.70				
Dark grey CLAY (Black cotton soil).		·	1.50				
Moderately weathered light brown agglomeratic TUFF of black subangular punice fragments upto 3cm in fine altered matrix.		△					
END OF TRAIAL PIT							

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <ul style="list-style-type: none"> <li>D Disturbed sample</li> <li>B Bulk sample</li> <li>W Water sample</li> <li>P Piston (P) Tube (U) or core sample length to scale</li> <li>S Standard Penetration Test</li> <li>V Vane Test</li> <li>C Core recovery</li> <li>r Rock Quality Designation (RQD)</li> </ul>	<p>Remarks</p> <p>A-145</p>	<p>Logged by</p> <p>J. O.</p>
			<p>Scale</p> <p>1:50</p>
			<p>Fig.</p>





Equipment & Methods. Pick/shovel hand tools excavation G.L.-1.00m	Location. NAIROBI BY - PASS
---	--------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 27/7/90
---	--------------	-------------	-----------------

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records	
				Depth	Sample			Test
					Type	No		
Dark grey CLAY (Black cotton soil).								
Slightly weathered light grey agglomeratic TUFF of angular pumice fragments upto 4cm in fine ashy matrix.			0.50 1.00					
END OF TRIAL PIT								

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key.</p> <p>D Disturbed sample</p> <p>B Bulk sample</p> <p>W Water sample</p> <p>P Piston (P) Tube (U) or core sample length to scale</p> <p>S Standard Penetration Test</p> <p>V Vane Test</p> <p>C Core recovery</p> <p>r Rock Quality Designation (RQD - %)</p>	<p>Remarks</p> <p>A-146</p>	Logged by J.O.
			Scale 1:50
			Fig.







Equipment & Methods. Pick/shovel hand tools  
excavation 0.1-1.00m

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level

Coordinates

Date

27/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	Test No	
Dark grey CLAY (Black cotton soil).							
Light green in situ tuff GRAVEL.			0.55				
Moderately weathered agglomeratic TUFF.			0.80				
			1.00				
END OF TRIAL PIT							

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres  
Thickness given in brackets in depth column

W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.

- D Disturbed sample
- Bulk sample
- W Water sample
- ▬ Piston (P) Tube (U) or core sample length to scale
- S Standard Penetration Test
- V Vane Test
- C Core recovery
- F Rock Quality Designation

Remarks

A-147

Logged by  
J. O.

Scale

1:50

Fig.





Equipment & Methods. Pick/Shovel hand tools  
excavation 0.6-0.65m

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level

Coordinates

Date

27/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Dark grey CLAY (Black cotton soil).							
Slightly weathered grey agglomeratic TUFF.			0.65				
END OF TRIAL PIT							

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)  
 DEPTHS: All depths and reduced levels in metres  
 Thickness given in brackets in depth column  
 W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.  
 D Disturbed sample  
 B Bulk sample  
 W Water sample  
 P Piston (P) Tube (U) or core sample length to scale  
 S Standard Penetration Test  
 V Vane Test  
 C Core recovery  
 F Rock Quality Designation

Remarks  
 A-148

Logged by  
 J.O.  
 Scale  
 1:50  
 Fig.





Equipment & Methods: Pick/shovel hand tools  
excavation G.L.-0.60m

Location:

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level

Coordinates

Date

27/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples/Tests			Field Records
				Depth	Sample Type	Test No	
Dark grey CLAY (Black cotton soil).							
Slightly weathered grey agglomeratic TUFF.			0.60				
END OF TRIAL PIT							

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres  
Thickness given in brackets in depth column

W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key

- D Disturbed sample
- B Bulk sample
- W Water sample
- P Piston (P) Tube (U) or core sample length to scale
- S Standard Penetration Test
- V Vane Test
- C Core recovery
- r Rock Quality Designation (RQD - %)

Remarks

A-149

Logged by  
J.O.

Scale  
1:50

Fig.





# Mowlem Construction Co. Ltd.

Borehole No. TB 8  
Sheet 1 of 1

Equipment & Methods: Pick/Shovel hand tools  
excavation Q.L-1,00m

Location:  
NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL  
COOPERATION AGENCY

Ground Level      Coordinates      Date  
27/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Dark grey CLAY (Black cotton soil).			0.65				
Highly weathered brown altered agglomeratic TUFF.			1.00				
END OF TRIAL PIT							

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres  
Thickness given in brackets in depth column

W.R.L: Water level observations during boring are given on the last sheet of log.

Sample / Test Key.

- D Disturbed sample
- B Bulk sample
- W Water sample
- Piston (P) Tube (U) or core sample length to scale
- S Standard Penetration Test
- V Vane Test
- C Core recovery
- r Rock Quality Designation (RQD - %)

Remarks

A-150

Logged by  
J. O.

Scale  
1:50

Fig.







# Mowlem Construction Co. Ltd.

Borehole No. TB 9

Sheet 1 of 1

Equipment & Methods. Pick/Shovel hand tools excavation 0.1-0.80m

Location.

NAIROBI BY-PASS

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY

Ground Level

Coordinates

Date

27/7/90

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type No	Test	
Dark grey SILTY CLAY (Black cotton soil).			0.15				
Orange brown mottled black nodular lateritic GRAVEL.			0.65				
Slightly weathered grey agglomeratic TUFF.			0.80				
END OF TRIAL PIT							

S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)

DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column

W.R.L: Water level observations during boring are given on the last sheet of log.

### Sample / Test Key.

- D Disturbed sample
- B Bulk sample
- W Water sample
- P Piston (P) Tube (U) or core sample length to scale
- S Standard Penetration Test
- V Vane Test
- C Core recovery
- R Rock Quality Designation

### Remarks

A-151

Logged by

J. O.

Scale

1:50

Fig.





Equipment & Methods: Pick/Shovel hand tools excavation G.L.-1.50m	Location: NAIROBI BY-PASS
--	------------------------------

Carried out for: JAPAN INTERNATIONAL COOPERATION AGENCY	Ground Level	Coordinates	Date 25/7/90
---	--------------	-------------	-----------------

Description	Reduced Level	Legend	Depth & Thickness	Samples / Tests			Field Records
				Depth	Sample Type	Test No	
Dark grey CLAY (Black cotton soil).		[Pattern]	1.00				
Brown slightly sandy CLAY trace fine gravel.		[Pattern]	1.50				
END OF TRIAL PIT							

<p>S.P.T: Where full 0.3m penetration has not been achieved the number of blows for the quoted penetration is given (Not N value)</p> <p>DEPTHS: All depths and reduced levels in metres Thickness given in brackets in depth column</p> <p>W.R.L: Water level observations during boring are given on the last sheet of log.</p>	<p>Sample / Test Key:</p> <ul style="list-style-type: none"> <li>D Disturbed sample</li> <li>B Bulk sample</li> <li>W Water sample</li> <li>P Piston (P) Tube (U) or core sample length to scale</li> <li>S Standard Penetration Test</li> <li>V Vane Test</li> <li>C Core recovery</li> <li>r Rock Quality Designation</li> </ul>	<p>Remarks</p> <p>A-152</p>	Logged by J. O.
			Scale 1:50
			Fig.





