QU = 82
MAP = 83122
E 520 800
N 5267 210
ACC 2
2 = ROTARY

REF No 18725

...t of Public Works (Tas)
...ls and Research Division

engineering log – borehole

borehole no: P3
sheet 1 of 1

file: 43 005

OLD BEACH ROAD
project: JORDAN RIVER BRIDGE
borehole location: (SEE PLAN) CH 1458.3 m 5.4m Upstream

hole commenced: 13-8-76
hole completed: 13-8-76
supervised by: T. S.
log checked by: W.K

drill model and mounting: MAYHEW 1000
hole diameter: 150 mm
slope: Vert deg. – bearing: – deg. –
R.L. surface: 0.00 m
datum: State
operator: Hassel

method	penetration 1 2 3	support	water	notes samples, tests, etc.	R.L. depth metres	graphic log	classification symbol	material: soil type: plasticity or particle characteristics, colour, secondary and minor components.	moisture condition	consistency, rel. density	hand penetrometer kPa 100 200 300 400	structure and additional observations
					0			WATER				
				–1.90								
W					–2			Black clayey silt				
					–4							
					–6							
W					–12			Black clayey silt				
					–14							
					–16							
				–17.59								
R					–18	V V V V V		Weathered Basalt				Inferred
				–18.53								END
					–20			Fresh Basalt				Inferred

key

method
AS auger screwing*
AD auger drilling*
R roller/tricone
W washbore
CT cable tool
* bit shown by suffix:
B – blank bit
V – "V" bit
T – TC bit

support
C casing
M mud

penetration
1 2 3 – no resistance ranging to refusal

water
10 Oct, 73 water level on date shown

notes – samples and tests
U50 – undisturbed sample 50 mm diameter
D – disturbed sample
N – standard penetration test:figure = result
N* – SPT + sample
Nc – cone penetrometer

classification symbols and soil description
based on unified classification system

moisture
D – dry
M – moist
W – wet

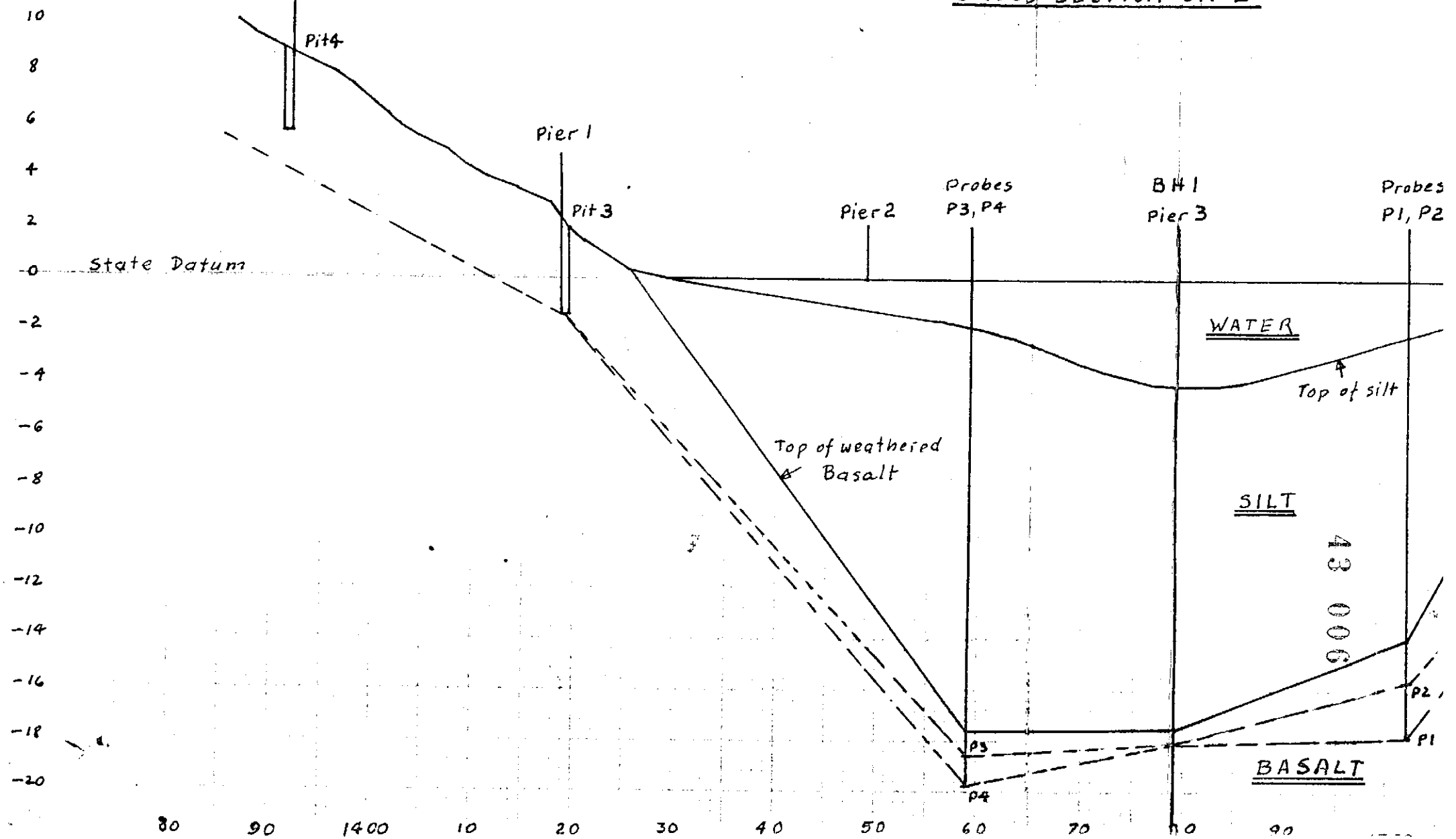
consistency/relative density
VS – very soft
S – soft
F – firm
St – stiff
VSt – very stiff
H – hard
Fb – friable
VL – very loose
L – loose
MD – moderately dense
D – dense

borehole no.

OLD BEACH ROAD - JORDAN RIVER BRID

FOUNDATION INVESTIGATION

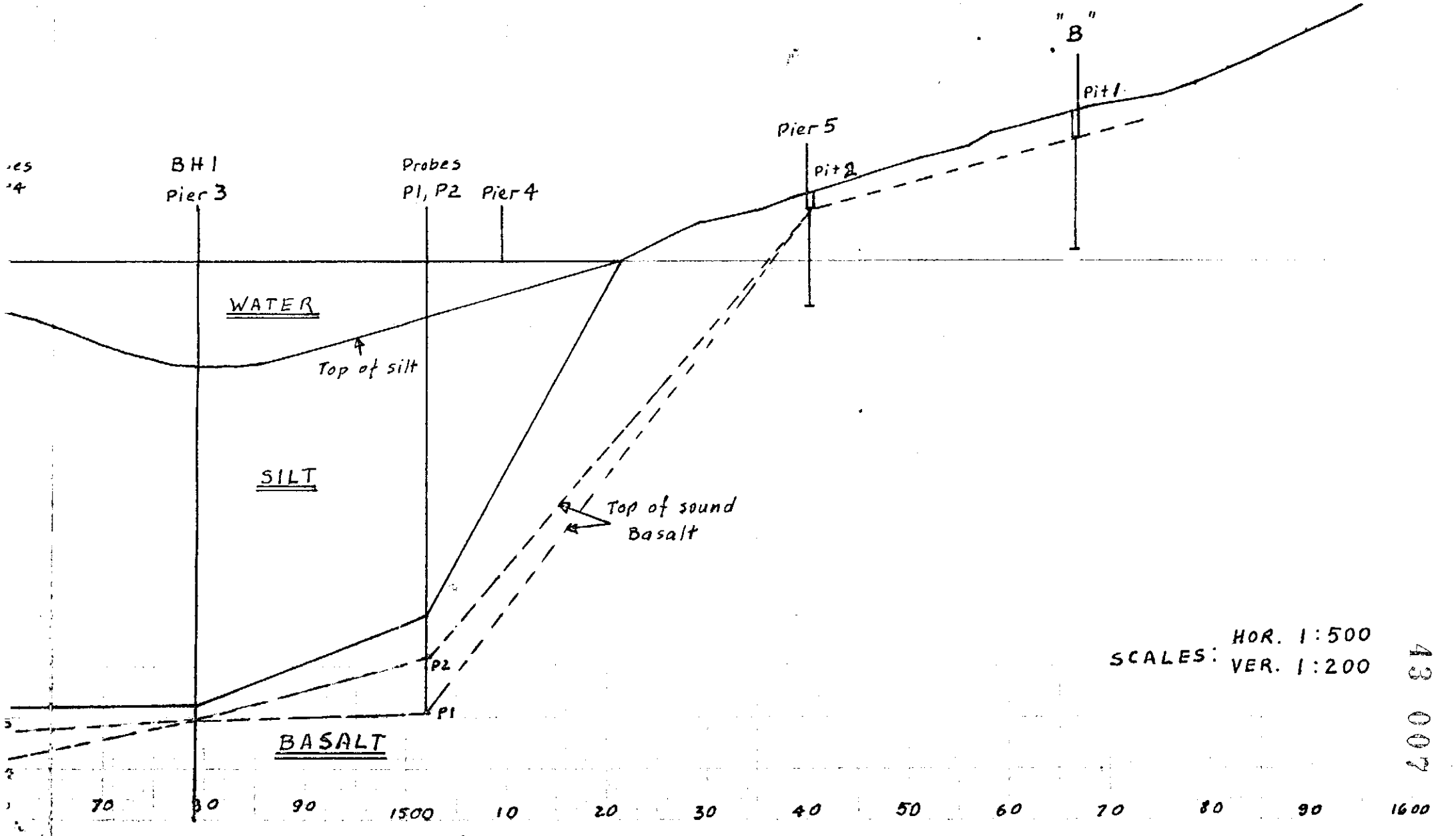
CROSS-SECTION ON ℄



ACH ROAD - JORDAN RIVER BRIDGE

NDATION INVESTIGATION

'OSS-SECTION ON ℄



SCALES: HOR. 1:500
VER. 1:200

43 007

QL 82
MAP 83122
ACC 2
E 520880
N 5267220
6 EX

engineering log — excavation

PIT 3

43 008

pit no: 3
sheet 1 of 1

file:

project: OLD BEACH ROAD
JORDAN RIVER BRIDGE
pit location: PIER 1 CH 1419 ℄

pit commenced: 25-6-76
pit completed: 25-6-76
supervised by: W.D.
log checked by: W.K.

equipment type and model: Excavator JCB 807
excavation dimensions: 3 m long, 1 m wide

R.L. surface: 1.98 m
datum: State
operator: Stanton

method	penetration 1 2 3	support	water	notes samples, tests, etc.	R.L. / depth in metres	graphic log	classification symbol	material: soil type: plasticity or particle characteristics, colour, secondary and minor components.	moisture condition	consistency, rel. density	hand penetrometer 100 kPa 200 300 400	structure and additional observations
BH								Black Topsoil and sandy clay	W M	S		
BH					1			Brown weathered Basalt gravel 25mm m	D	MD		
BH					2			Brown to Black close jointed Basalt. Some clay in joints Clay content decreasing	D	D		stone size 25 – 150 mm m
					3			Stone size increasing with depth	D			150 TO MASSIVE
					4			REFUSAL				END 3.4 m

key

method
- N natural exposure
- E existing excavation
- BH backhoe bucket
- B bulldozer blade
- R ripper

support
- T timbering

penetration
- 1 2 3 no resistance ranging to refusal

water
- 10 Oct, 73 water level on date shown
- water inflow
- water outflow

notes — samples and tests
- U50 — undisturbed sample 50 mm diameter
- D — disturbed sample
- N — standard penetration test:figure = result
- N* — SPT + sample
- Nc — cone penetrometer

classification symbols and soil description based on unified classification system

moisture
- D — dry
- M — moist
- W — wet

consistency/relative density
- VS — very soft
- S — soft
- F — firm
- St — stiff
- VSt — very stiff
- H — hard
- Fb — friable
- VL — very loose
- L — loose
- MD — moderately dense
- D — dense
- VD — very dense

Qu 82
MAP 83122
Acc 2

...arch Division

engineering log — excavation

PIT 4 { E 520 860
N 5267240
6 : EX

43 009

pit no: 4
sheet 1 of 1

file:

project: OLD BEACH ROAD
JORDAN RIVER BRIDGE
pit location: ABUTMENT "A" CH 1391 ℄

pit commenced: 25-6-76
pit completed: 25-6-76
supervised by: W.D.
log checked by: W.K.

equipment type and model: Excavator JCB 807
excavation dimensions: 3 m long, 1 m wide

R.L. surface: 9.15 m
datum: State
operator: Stanton

method	penetration 1 2 3	support	water	notes samples, tests, etc.	R.L. / depth metres	graphic log	classification symbol	material soil type: plasticity or particle characteristics, colour, secondary and minor components.	moisture condition	consistency, rel. density	hand penetrometer 100 kPa 200 300 400	structure and additional observations
								Black clayey topsoil	M	S		
BH					1			Brown weathered Basalt gravel. Fairly uniform, well graded from 25mm down.	D	H Fr		All greater than 500 kPa
					2					H Fr		
					3				D			END 3.5m
					4			'Same Material				

key

method
- N natural exposure
- E existing excavation
- BH backhoe bucket
- B bulldozer blade
- R ripper

support
- T timbering

penetration
- 1 2 3 no resistance ranging to refusal

water
- 10 Oct, 73 water level on date shown
- water inflow
- water outflow

notes — samples and tests
- U50 — undisturbed sample 50 mm diameter
- D — disturbed sample
- N — standard penetration test:figure = result
- N* — SPT + sample
- Nc — cone penetrometer

classification symbols and soil description
based on unified classification system

moisture
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consistency/relative density
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- St — stiff
- VSt — very stiff
- H — hard
- Fb — friable
- VL — very loose
- L — loose
- MD — moderately dense
- D — dense
- VD — very dense

...and Research Division

engineering log — excavation

QV : 82
MAD : 83122
ACC 2
PIT 1 { E521000 N5267140 }
6 EX

file: 43 010

pit no: 1
sheet 1 of 1

project: OLD BEACH ROAD JORDAN RIVER BRIDGE
pit location: ABUTMENT "B" CH 1566 ℄

pit commenced: 16-6-76
pit completed: 16-6-76
supervised by: W.D.
log checked by: W.K.

equipment type and model: Back Hoe MF 303
excavation dimensions: 4.0 m long, 0.75 m wide
R.L. surface: 6.00 m
datum: State
operator: P.W.D.

method	penetration 1 2 3	support	water	notes samples, tests, etc.	R.L. depth metres	graphic log	classification symbol	material soil type: plasticity or particle characteristics, colour, secondary and minor components.	moisture condition	consistency, rel. density	hand penetrometer kPa 100 200 300 400	structure and additional observations
BH								Brown topsoil and Brown friable clay				
BH					1			Brown-Black weathered Basalt with some clay				END BH 1.3 m
Jackhammer/Probe					2, 4, 5			Jointed Basalt Alternating hard and weathered layers. Water at the bottom				Dust black and brown. Variable penetration rate. Some jamming of drill steel. END 5.6 m
					6							

key

method
N natural exposure
E existing excavation
BH backhoe bucket
B bulldozer blade
R ripper

support
T timbering

penetration
1 2 3 no resistance ranging to refusal

water
10 Oct, 73 water level on date shown
water inflow
water outflow

notes — samples and tests
U50 — undisturbed sample 50 mm diameter
D — disturbed sample
N — standard penetration test figure = result
N* — SPT + sample
Nc — cone penetrometer

classification symbols and soil description
based on unified classification system

moisture
D — dry
M — moist
W — wet

consistency/relative density
VS — very soft
S — soft
F — firm
St — stiff
VSt — very stiff
H — hard
Fb — friable
VL — very loose
L — loose
MD — moderately dense
D — dense
VD — very dense

QU 82
MAP 83122
ACC 2
PIT 2 { E 520980
N 5267170
6 : EX

Research Division

engineering log — excavation

pit no: 2
sheet 1 of 1

file: 43 011

OLD BEACH ROAD
project: JORDAN RIVER BRIDGE
pit location: PIER 5 CH1540 ℄

pit commenced: 16-6-76
pit completed: 16-6-76
supervised by: W.D.
log checked by: W.K.

equipment type and model: Back Hoe MF 303
excavation dimensions: 1.0 m long, 0.75 m wide

R.L. surface: 2.75 m
datum: State
operator: P.W.D.

method	penetration 1 2 3	support	water	notes samples, tests, etc.	R.L. depth metres	graphic log	classification symbol	material soil type: plasticity or particle characteristics, colour, secondary and minor components.	moisture condition	consistency, rel. density	hand penetrometer 100 kPa 200 300 400	structure and additional observations
BH								Brown to Black close jointed Basalt	M D	MD D	>100 kPa	Some clay in joints END BH 0.8m
Jackhammer probe					1 2 3 4			Jointed Basalt				Inferred Pneumatic drill probe drilling as in sound rock. Jammed at 4.55m Wet tip. End 4.55m
					5							

key

method
- N natural exposure
- E existing excavation
- BH backhoe bucket
- B bulldozer blade
- R ripper

support
- T timbering

penetration
- 1 2 3 — no resistance ranging to refusal

water
- 10 Oct, 73 water level on date shown
- water inflow
- water outflow

notes — samples and tests
- U50 — undisturbed sample 50 mm diameter
- D — disturbed sample
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- VL — very loose
- L — loose
- MD — moderately dense
- D — dense
- VD — very dense