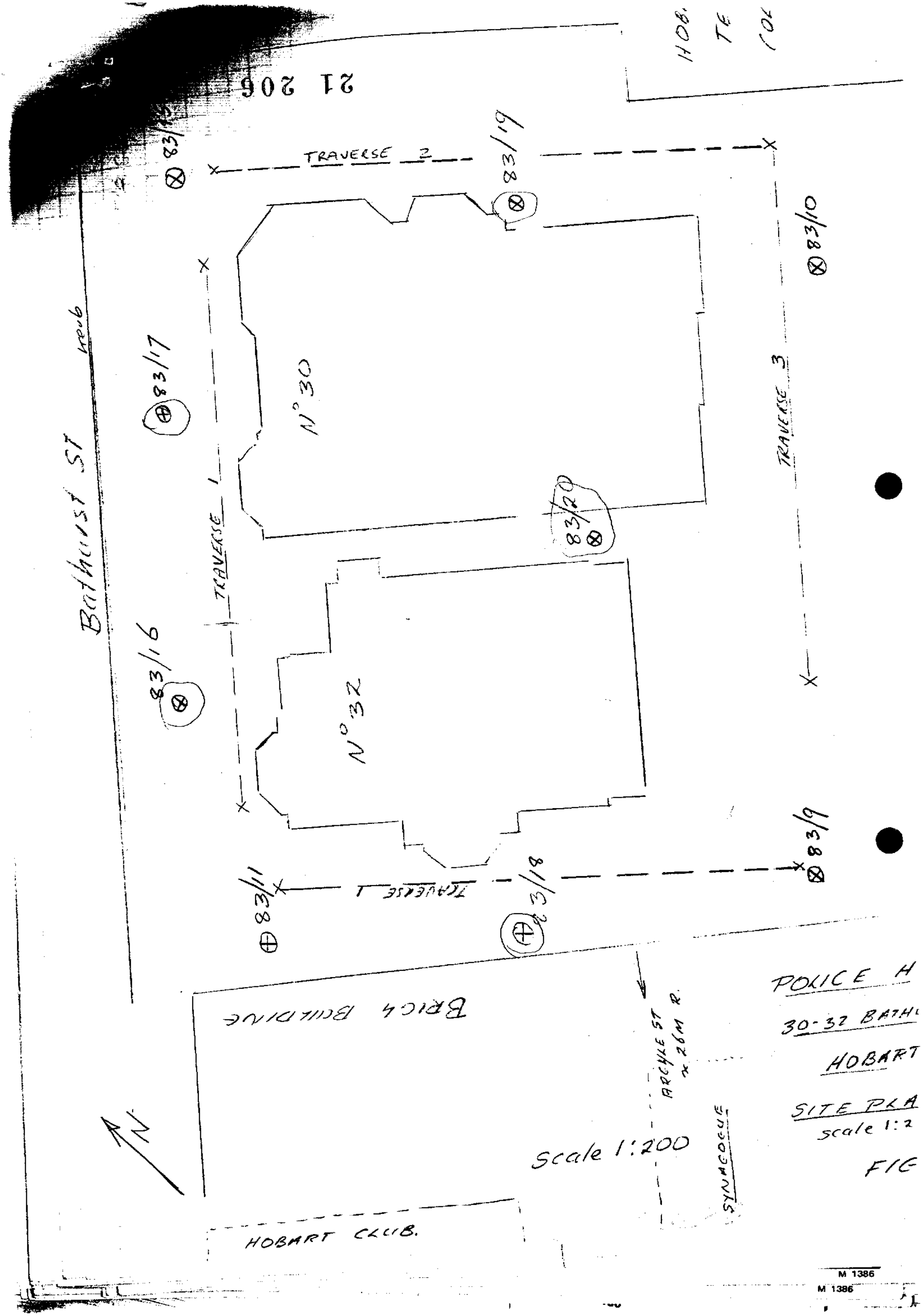
21 206
TRAVERSE 2
83/19
83/10
N° 30
TRAVERSE 3
83/20
TRAVERSE 1
83/17
83/16
Bathurst ST
Kerb
N° 32
83/9
TRAVERSE 1
83/18
83/11
BRICK BUILDING
ARGYLE ST x 26M R.
SYNAGOGUE
Scale 1:200
N
HOBART CLUB.
POLICE H
30-32 BATH
HOBART
SITE PLA
scale 1:2
FIG
M 1386
M 1386

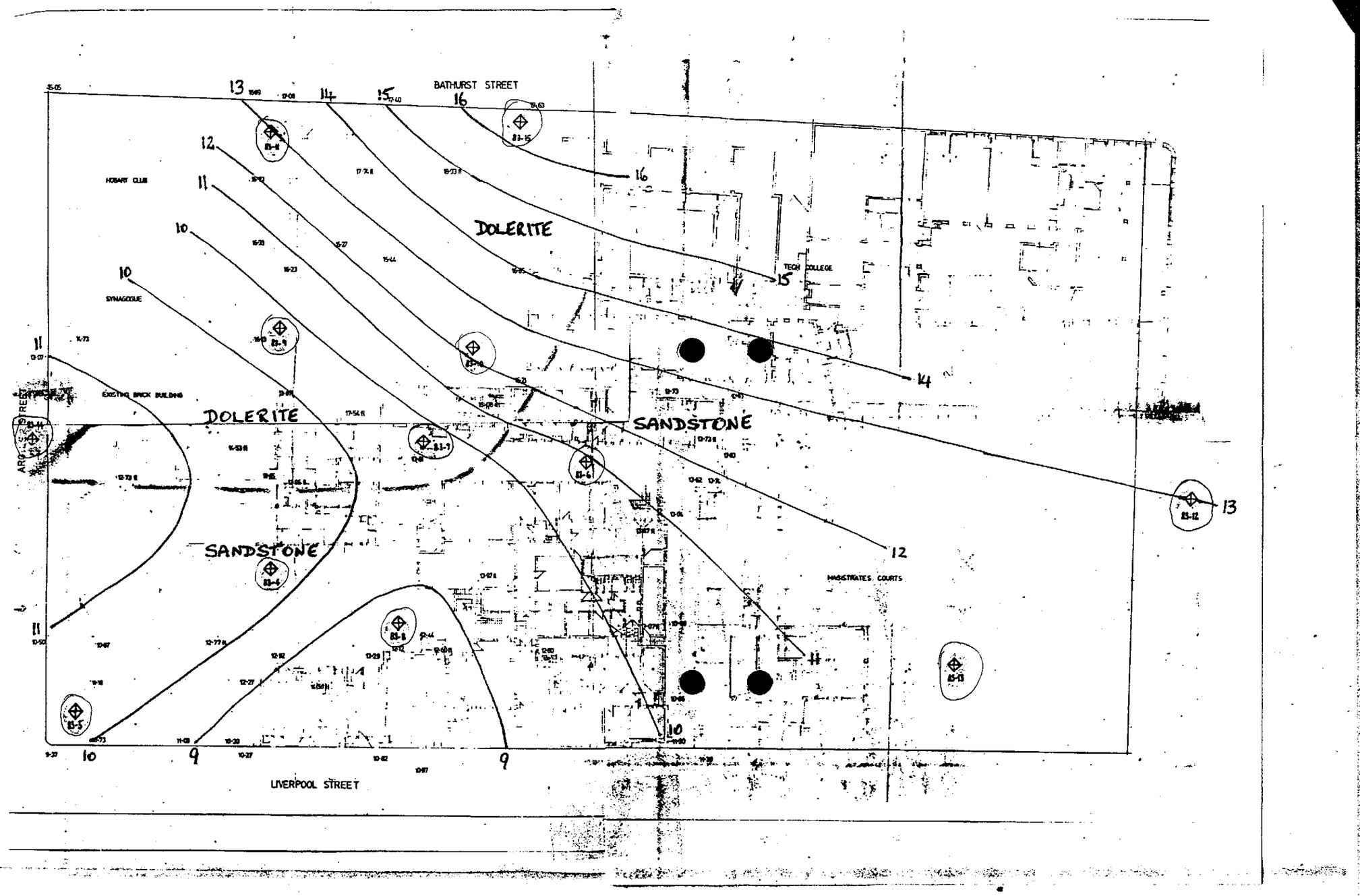

FIG 1: Location of boreholes New Police Headquarters, HOBART ⊕B3-4
Possible structural contours for top of in situ rock materials shown ——13
along with possible position of boundary between dolerite and sandstone — — —

method
AS auger screwing*
AD auger drilling*
R roller/tricone
W washbore
CT cable tool
* bit shown by suffix:
C casing
M mud

penetration
1 2 3 no resistance ranging to refusal

U50 – undisturbed sample 50 mm diameter
D – disturbed sample
N – standard penetration test:figure = result
N* – SPT + sample

based on unified classification system

moisture
D – dry
M – moist
W – wet

S – soft
F – firm
St – stiff
VSt – very stiff
H – hard
Fb – friable
VL – very loose
L – loose
MD – moderately dense

Dept of Main Roads (Tas)
Road and Research Division

engineering log – borehole

REF No 18295
QUAD 82
MAP SHEET 83122

ACC 1
PURD
E526735
N5252365
file:

borehole no: 83-6
sheet 1 of 3

project: NEW POLICE HEADQUARTERS
borehole location: HOBART AS PER PLAN

hole commenced: 1-6-83
hole completed: 2-6-83
supervised by: T. SWANTON
log checked by: B. WELDON

drill model and mounting: GEMCO (trailer)
hole diameter: 90 mm

slope: Vert deg.
bearing: – deg.

R.L. surface: ~13.7 m
datum:
operator: G. BAKER

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
W								CONCRETE				Water Levels: Date 6-6 Depth 3.0m; 7-6 3.0; 8-6 2.95; 9-6 2.9; 14-6 2.95; 17-6 3.02
								RUBBLE / LANDFILL				
								SANDY CLAY				
				N* = 19 (4, 9, 10)	0.99 1 1.44		SC	SANDY CLAY: brown-grey; medium plasticity; MC < P.L.; fine grained sand.	M	VSt		
WATT					2							
			3/6	N* = 46 (9, 22, 24)	2.55 3.00 3		GP	GRAVEL: dolerite and sandstone medium size subangular gravel. micaceous clayey fines	M	Fb D		small dolerite dyke ? or landfill ?
								continued on engineering log – cored borehole sheet				
					4							
					5							

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
e.g. ADT

support
C casing
M mud

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

M 1848

21 211

DEPARTMENT OF MAIN ROADS (TAS.)
MATERIALS AND RESEARCH DIVISION

engineering log — cored borehole

borehole no: 83-6
sheet 2 of 3

File No.

project: NEW POLICE HEADQUARTERS
borehole location: HOBART AS PER PLAN

hole commenced: 1-6-83
hole completed: 2-6-83
supervised by: T. SWANTON
log checked by: B. WELDON

drill model and mounting: Gemco (trailer) slope: Vert deg.
barrel type and length: NQTT 1.5m fluid H_2O bearing: — deg.

R. L. surface: N13.7 m
datum: Driller G. BAKER

drilling information				rock substance					rock mass defects	
method	case-lift	water	R.L. depth metres	graphic log core loss	substance description rock type: grain characteristics, colour, structure, minor components.	weathering	strength Is (50) EL VL L M H VH EH	defect spacing mm 30 60 200 600 2000 >6000	defect description thickness, type, inclination, planarity, roughness, coating. particular	general
					Continued from engineering log - borehole sheet					
			3.00 3		CORE LOSS					
			3.15		SILTSTONE: brown, micaceous carbonaceous	HW			40-60° joint	
			4.05 4		SANDSTONE: brown, fine grained	MW				
			4.25		CORE LOSS					
					SANDSTONE: brown, medium grained	SW			30-50°	
			5		grey	MW				
			5.55		brown	SW			40-60°	
NQTT			6							
			7.10 7							
										Most defects are bedding plane partings 0 - 15°
			8							

Drill loss of 50 mm in 1400mm

key

method

AS	auger screwing
AD	auger drilling
R	roller/tricone
W	washbore
NMLC	NMLC core drilling

case-lift
- casing used
- barrel withdrawn

water
- 10 Oct, 73 water level date shown
- water inflow
- partial drilling water loss
- complete drilling water loss

graphic log/core loss
- core recovered (hatching indicates material)
- no core recovered

weathering

Fr	fresh
SW	slightly weathered
MW	moderately weathered
HW	highly weathered
EW	extremely weathered

strength (Indirect tensile strength)

EL	extremely low
VL	very low
L	low
M	medium
H	high
VH	very high
EH	extremely high

M 1386

DEPARTMENT OF MAIN ROADS (TAS.)
MATERIALS AND RESEARCH DIVISION

M & R.F8

borehole no: 83-6
sheet 3 of 3

engineering log — cored borehole

File No.

project: NEW POLICE HEADQUARTERS HOBART
borehole location: AS PER PLAN

hole commenced: 1-6-83
hole completed: 2-6-83
supervised by: T. SWANTON
log checked by: B. WELDON

drill model and mounting: GEMCO (Hoister) slope: Vert deg.
barrel type and length: NQTT 1.5m fluid H_2O bearing: – deg.

R. L. surface: m
datum: Driller G. BAKER

drilling information				rock substance					rock mass defects	
method	case-lift	water	R.L. depth metres	graphic log core loss	substance description: rock type: grain characteristics, colour, structure, minor components.	weathering	strength Is (50) EL VL L M H VH EH	defect spacing mm 30 100 300 1000 3000 >3000	defect description: thickness, type, inclination, planarity, roughness, coating. particular	general
NQTT			8		SANDSTONE: brown medium grained	SW			broken	Defects in sandstone are mostly bedding plane partings, sub-horizontal. Mudstone appears to be brecciated & fault zone.
			8.55		drill loss of 60mm in 1560mm					
			9						15°	
					grey	MW			very broken	
					20mm thick CLAY: brown med plasticity				slickensides.	
			10		MUDSTONE: brown	HW			very broken; 60°-40° joints; planar, smooth, & clay lined	
			10-11		BRECCIATED ZONE					
			11			EW				
			11.28		Borehole 83-6 terminated at 11.28 m depth.					
			12							
			13							

21 213

key

method: AS auger screwing; AD auger drilling; R roller/tricone; W washbore; NMLC NMLC core drilling

case-lift: casing used; barrel withdrawn

water: 10 Oct, 73 water level date shown; water inflow; partial drilling water loss; complete drilling water loss

graphic log/core loss: core recovered (hatching indicates material); no core recovered

weathering: Fr – fresh; SW – slightly weathered; MW – moderately weathered; HW – highly weathered; EW – extremely weathered

strength (indirect tensile strength): EL – extremely low; VL – very low; L – low; M – medium; H – high; VH – very high; EH – extremely high

M 1386