21 206

HOB.
TE
COL

83/19

TRAVERSE 2

83/10

83/17

TRAVERSE 1

N° 30

TRAVERSE 3

83/20

Bathurst St

83/16

N° 32

83/9

83/11

TRAVERSE 4

83/18

Brick Building

ARGYLE ST
× 26M R.

SYNAGOGUE

HOBART CLUB.

N

Scale 1:200

POLICE H

30-32 BATHU

HOBART

SITE PLA

scale 1:2

FIG

M 1386

M 1386

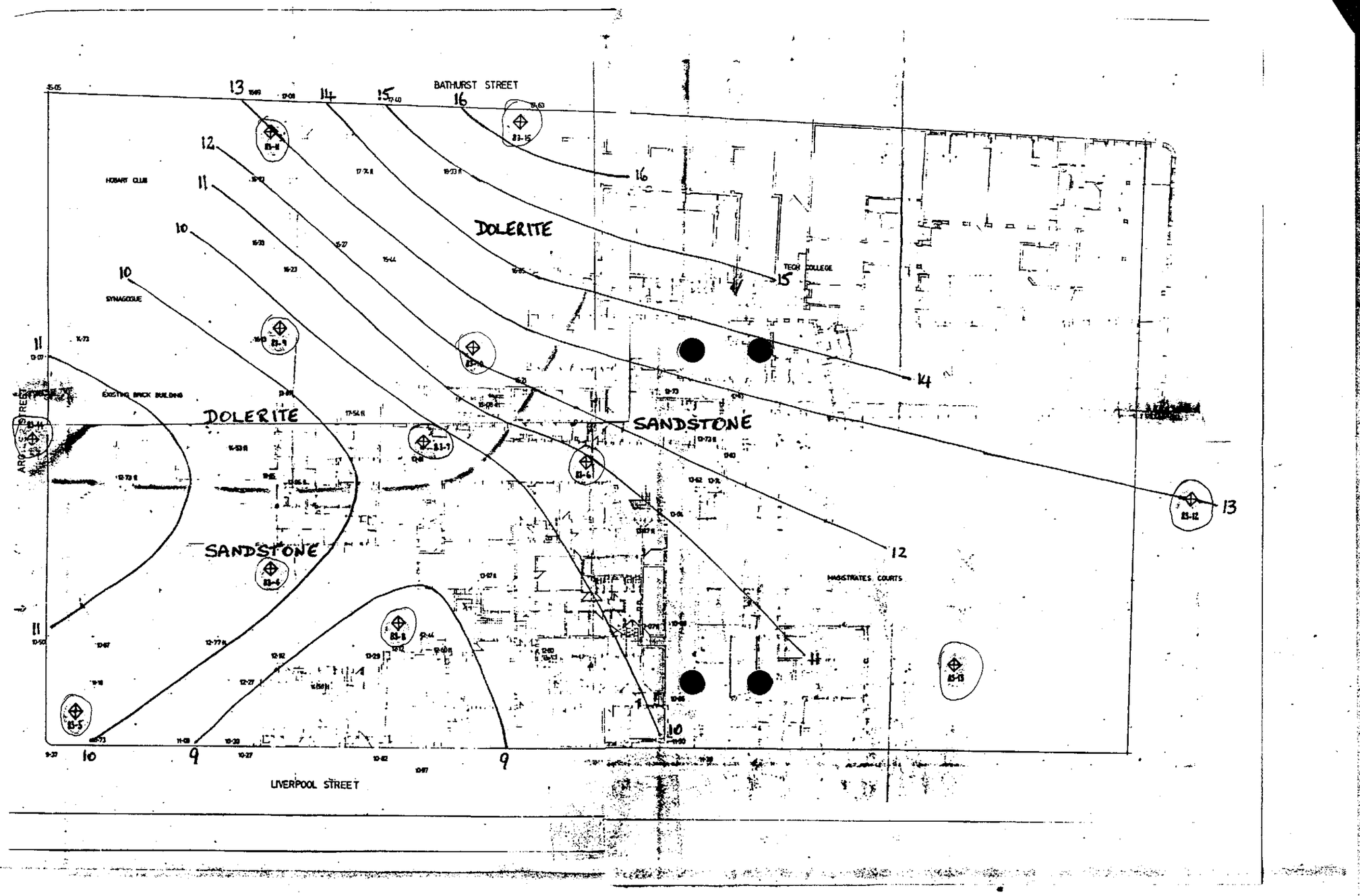

FIG 1: Location of boreholes New Police Headquarters, HOBART ⊕B3-4
Possible structural contours for top of in situ rock materials shown ——13
along with possible position of boundary between dolerite and sandstone — — —

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

REF. No. 18293

QUAD 82 M-SHEET 83122

AC PUR
1 = 0

borehole no: 83-4
sheet 1 of 2

engineering log – borehole

E 526695
file: N5252320

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

hole commenced: 31-5-83
hole completed: 31-5-83
supervised by: T. SWANTON
log checked by: B. WELDON

drill model and mounting: GEMCO (trailer)
hole diameter: 110 mm
slope: Vert deg.
bearing: – deg.
R.L. surface: N 13.3 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 100 200 300 400 kPa	structure and additional observations
								RUBBLE: sandy clay; brown landfill.				Water levels date depth 3-6 2.8m 6-6 2.9 7-6 2.9 8-6 2.9 9-6 2.75 14-6 2.85 17-6 3.00
AS		M		N* = 17 (3,7,10)	1.50 1.95		SC	SANDY CLAY: grey-brown; medium plasticity; Moisture content ≈ plasticity limit; sand fine grained	M	H		
			2/6 ▼	N* > 50 8,31/150	3.00 3.30		SC	CLAYEY SAND: light yellow; med. plasticity grey clay; fine sand	M	D		lost 31 blows for 150 mm of penetration
								continued on engineering log – cored borehole sheet				

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 1598

21 207

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

engineering log — cored borehole

borehole no: 83-4
sheet 2 of 2

File No.

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

hole commenced: 31-5-83
hole completed: 31-5-83
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: N13.3 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	defect description: thickness, type, inclination, planarity, roughness, coating. particular	general
NQTT			3.33 3		from engineering log - borehole sheet					
					CORE LOSS					
	H		4.11 4		SANDSTONE: brown; fine grained	HW				
			4.24		CORE LOSS					
					SANDSTONE: light yellow stained with brown iron	HW				
					CLAY: silty white; med. plasticity	EW				
			5		SANDSTONE: orange; bedded; medium grained; micaceous.	MW			Subvertical planar, rough clay + mica lined jt	
	H		5.68		MUDSTONE: orange	MW				
			6.13 6		CORE LOSS					
					MUDSTONE: brown-orange	HW				
					SANDSTONE: orange; fine grained; micaceous	MW				
						HW				
	H		7.11 7		medium grained	MW				
			7.46		CORE LOSS					
					SANDSTONE: light brown medium grained	HW MW				
			8		fine grained					
	H		8.61		medium grained					
			9		CORE LOSS					
			9.36							
					SANDSTONE: light brown, medium grained; current bedded; micaceous	MW			bedding up to 35°	
	H		10.11 10							
					END OF BOREHOLE 83-4 at -10.11 m depth					
			11							

Most defects are sub-horizontal bedding plane partings often with mica on surfaces. Much iron staining and some colour mottling

21 208

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