

COMPREHENSIVE DISCHARGE REGISTER

CWR NO.11

TITLE: Howick South.

WATER RIGHT/RESOURCE CONSENT No.760686

COMPREHENSIVE DISCHARGE CONSENT No.14/10/B/686

EXPIRY DATE: May 2011

CATCHMENT SIZE: 800 ha.

POINT OF DISCHARGE: Pakuranga Creek, N42 421531

PEAK DISCHARGE: 65 m³/s (2,300 cusecs). 2% AEP.

PRIMARY DESIGN STANDARD: 20% AEP.

SECONDARY DESIGN STANDARD:

See accompanying map for explanation of stream numbering.

Stream Number

1	10% AEP
2	5% AEP
3	2% AEP
4	2% AEP

FLOOR LEVEL RESTRICTION:

As stated in Water Right: Freeboard allowance shall be from 1ft 6in to 2ft (450mm to 600mm) for approved channel design where such freeboard allowance will accommodate twice the design flood flow otherwise freeboard allowance shall be in accordance with plan no. D-O/17, or refer to the Proposed District Plan (Section 9.9.1.2 (c)), **whichever is the more rigorous.**

OTHER CONDITIONS: -

COMPREHENSIVE DISCHARGE CONSENT LEVY: \$394 per ha.*

*Refer to Financial Contributions Register for updated figures.

S.W. QUALITY LEVY: N/A.*

PROPOSED WORK:

- Piping local drainage
- Open channel system, including low flow protection of main drainage reserve
- Low flow protection to lower reaches of stream. Adjacent steep and tree covered banks to be designated reserve land

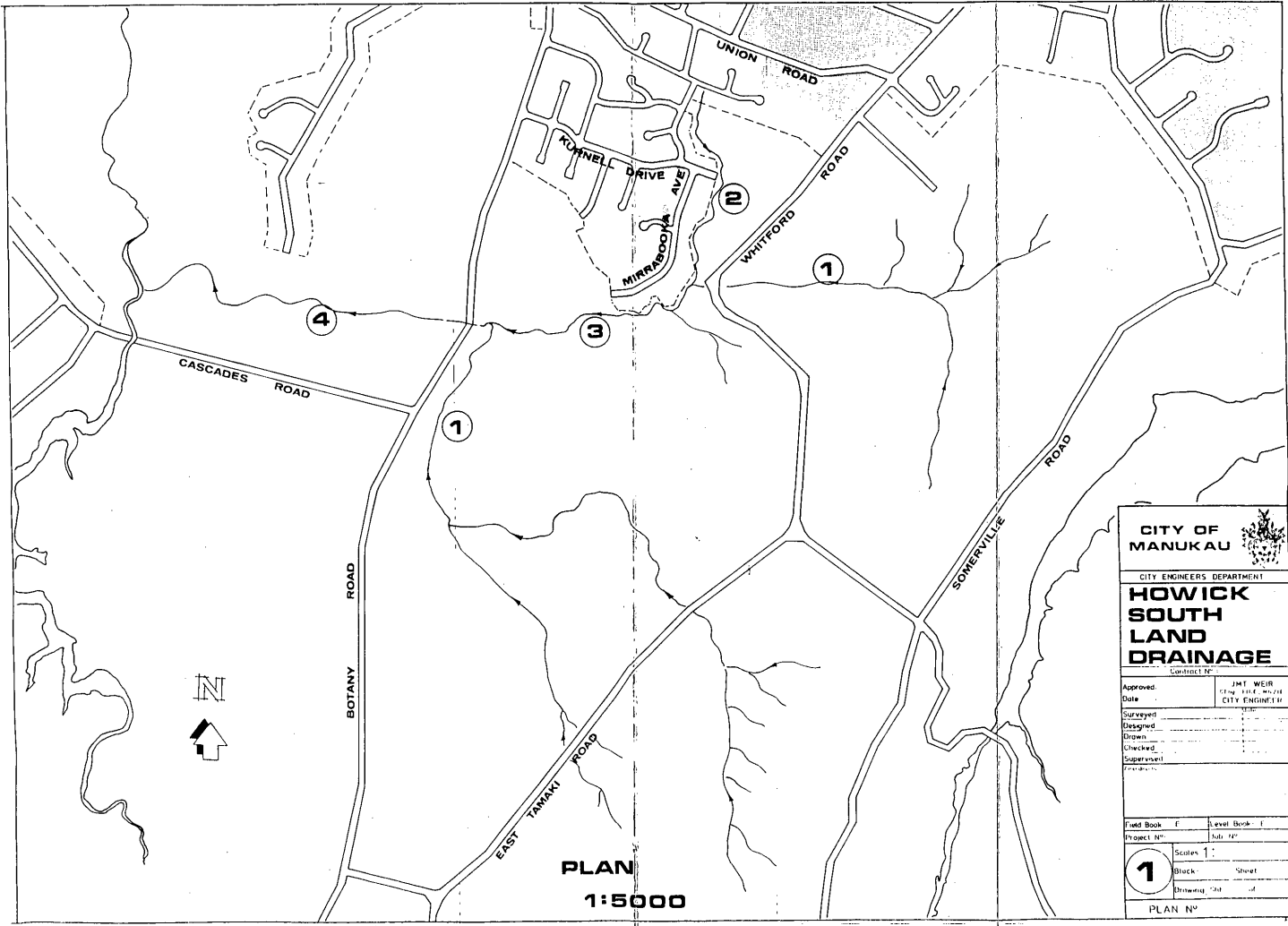
COST:* -

COMMENTS:

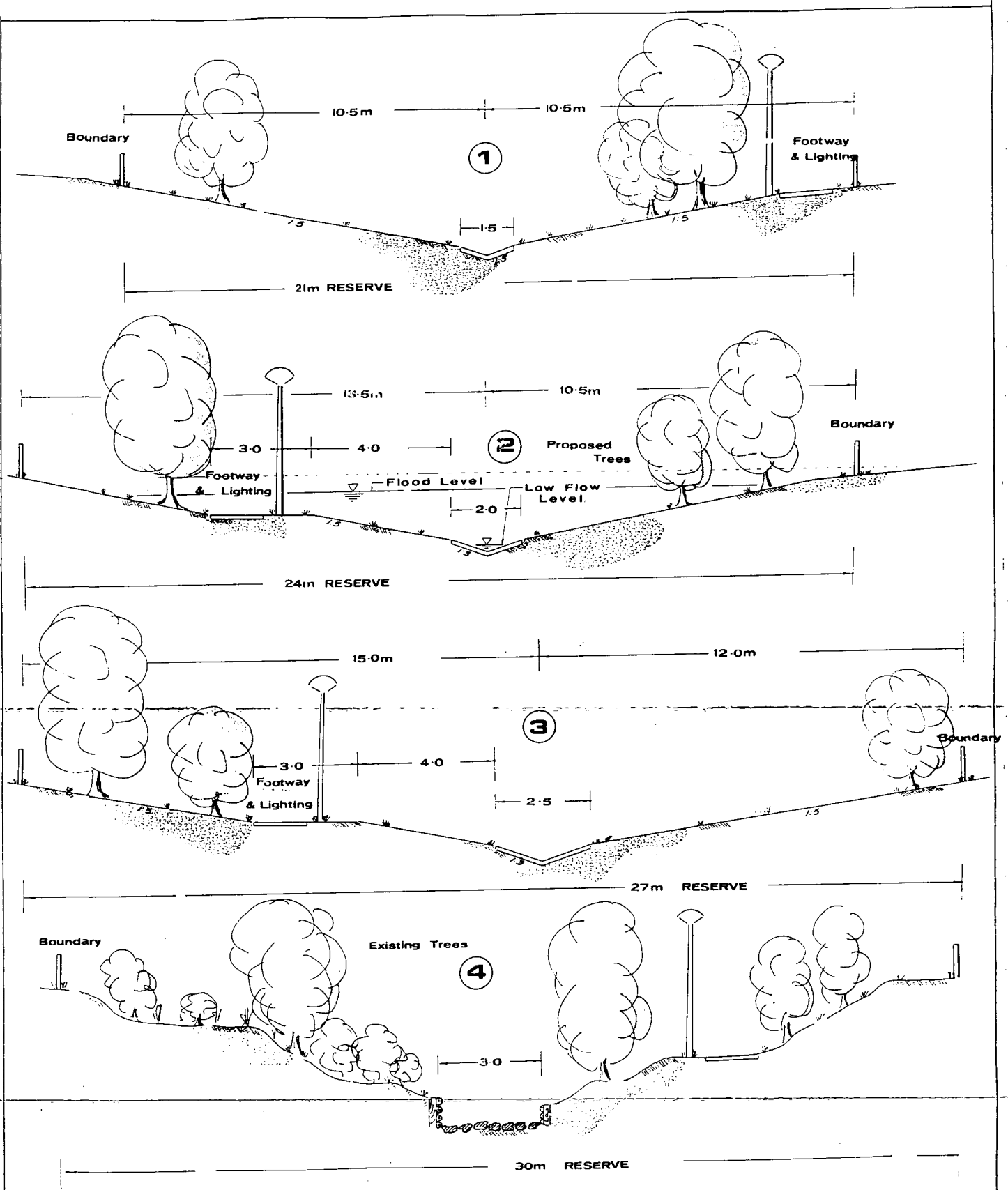
Water Right does not now apply to Moore St Catchment (CWR No. 12), which lies within old Howick Borough Council area.

Diagrams Included: Catchment location plan.
Stream numbering system.
Typical stream cross sections.

*Refer to Financial Contributions Register for updated figures.



CITY OF MANUKAU	
CITY ENGINEERS DEPARTMENT	
HOWICK SOUTH LAND DRAINAGE	
Contract No. _____	
Approved: _____	JIM WEIR City Engineer CITY ENGINEER
Date: _____	
Surveyed: _____	
Designed: _____	
Checked: _____	
Supervised: _____	
Field Book: F _____	Level Book: L _____
Project No: _____	Sub No: _____
1	Scales: 1" = _____
	Block: _____ Sheet _____
Drawing: _____ of _____	
PLAN No _____	



2		Field Book: E	Level Book: E
Block: 1		Job No:	
Drawing: 314		of	
PLAN No			
CITY OF MANUKAU			
CITY ENGINEERS DEPARTMENT			
HOWICK SOUTH LAND DRAINAGE			
CONTRACT NO.:			
Approved:	JMT WED	CITY ENGINEER	
Date:			
Surveyed:			
Designed:			
Drawn:			
Checked:			
Supervised:			

CATCHMENT	AREA ha
A	65.2
B	5.1
C	23.4
D	65.1
E	42.4
F	125.3
F1	67.2
F2	46.7
G	50.2
G1	35.1
H	11.2

