



REF M5532-660402- calcs xls

STORMWATER DESIGN CALCULATIONS

AT Lot AC , 101 PITT ROAD

NORTH CURL CURL

FOR FYFE, GILLESPIE & SHIPWAY

1.0 Detention System Requirements

1.1 Storage-Area calcs.

DATA

Site Area Assessed due to easements

Site Area = 0 0736 ha 736 sq m

OSD exemption if less than 450sqm or less than 40% site coverage

40% of site area = 294 4 sq m

Impervious Area Pre Development = 0 sqm

Percentage Impervious Pre Development = 0%

Impervious Area POST Development = 354 6 sqm

Percentage Impervious POST Development = 48%

Catchment directed through OSD = 676 sqm 91 8 %

OSD Bypass Areas	Impervious	0 sqm	0 0 %
	Pervious	60 sqm	100 0 %
	Total	60 sqm	8 2 %

Impervious area bypass 0 0 % OK

Detention A

Volume Required 14 72 cu m 200cum/ha

Total Area 79 00 sq m

Invert of pit = 9 35 m $Q = d^2 \cdot \sqrt{h} / 0.48$

Orifice Dia = 128 mm $d = \sqrt{((0.48 \cdot Q) / \sqrt{h})}$

Max Water Level achieved = 10 15 m

Storage achieved 9624 L

Minimum Storage 14720 L - SSR with no modelling

Maximum Discharge 29.4 L/s - PSD 400L/s/ha

Proposed Discharge 29 3 L/s - PSD OK

Basin Allowance

Raintank Basin = 2200 L

Raintank Provided = 2200 L

50% of OSD = 7360 L

Basin Type Above Ground Basin

Net OSD required 15024 L