

STORM WATER - EXISTING SITE RUN-OFFS

Document A

Job No.:	405000				
Job Name:	5-7 Station Road				
Total site Area		1895	m2		
Surface	Area (m2)	Run-off coeff	Eff Area (m2)		
Building 7 Station road	104	1.00	104	Roof and hard paved impermeable areas	
Building meridian motorhomes	112.6	1.00	112.6	Roof and hard paved impermeable areas	
Building Island Tyres	76	1.00	76	Roof and hard paved impermeable areas	
Building Herons Autos	319	1.00	319	Roof and hard paved impermeable areas	
Concrete hardstandings	1187	1.00	1187.4	Roof and hard paved impermeable areas	
Softlandscaped	96	0.00	0	Permeable surfacing	
Sum	1895			0.1895	

1 in 100 year event										1 in 1 year event											
Eff Area		1799	m2							Eff Area		1799	m2								
100 year return period + climate change					Storm duration (Min.)		T	N	r	Climate allowance 30%	1 year return period + climate change					Storm duration (Min.)		T	N	r	Climate allowance 30%
R5	0.02315	m			5	0.08 hrs	0.083333	0.1	0.023154		R5	0.01089	m			5	0.08 hrs	0.083333	1	0.010892	
R10	0.02869	m			10	0.17 hrs	0.166667	0.1	0.028694		R10	0.01379	m			10	0.17 hrs	0.166667	1	0.013788	
R15	0.03247	m			15	0.25 hrs	0.25	0.1	0.032473		R15	0.01576	m			15	0.25 hrs	0.25	1	0.015764	
R30	0.04002	m			30	0.50 hrs	0.5	0.1	0.040022		R30	0.01971	m			30	0.50 hrs	0.5	1	0.01971	
R60	0.04920	m			60	1.00 hrs	1	0.1	0.0492		R60	0.02451	m			60	1.00 hrs	1	1	0.024508	
R120	0.06036	m			120	2.00 hrs	2	0.1	0.060356		R120	0.03034	m			120	2.00 hrs	2	1	0.03034	
R240	0.07392	m			240	4.00 hrs	4	0.1	0.073917		R240	0.03743	m			240	4.00 hrs	4	1	0.037429	
R360	0.08317	m			360	6.00 hrs	6	0.1	0.083168		R360	0.04227	m			360	6.00 hrs	6	1	0.042265	
Run-off from site during 6 Hour event										Run-off from site during 6 Hour event											
Volume of total run-off				Flow in Ltrs / second during event						Volume of total run-off				Flow in Ltrs / second during event							
I360	149.619	m3		Flow	6.927	L/s				I360	76.035	m3		Flow	3.520	L/s					
Therefore total run off				149.6	m3	OR	6.927	L/s		Therefore total run off				76.0	m3	OR	3.520	L/s			