APPENDIX B

CALCULATIONS

Roof catchment	Roofwater tanks (50,000 litre storage/ha of roof area)			Rubbish Bins (Not Applicable to roof area)			Gross Polutant Trap (Not Applicable for this Project)			Filter Strip			Inflitration trench			Calculations		
	Pollutant reduction efficiencies based on conceptual model from MUSIC	Average adopted	Load not retained by device	Pollutant reduction efficiencies (BSDCP)	Average adopted	Load not retained by device	Pollutant reduction efficiencies (BSDCP)	Average adopted	Load not retained by device	Pollutant reduction efficiencies (BSDCP)	Average adopted	Load not retained by device	Pollutant reduction efficiencies (BSDCP)	Average adopted	Load not retained by device	Load remaining after treatment (based on 1 unit)	Percentage retained by treatment train	Reduction percentage of catchment
litter	100	0	1	30-75	0	1	Not proposed	0	1	30-50	40	0.6	0	0	1	0.15	85.00	21.25
coarse sediment	22.1	20	0.8	0	0	1	Not proposed	0	1	50-75	60	0.4	30-75	50	0.5	0.04	96.00	24.00
fine sediment(suspended solids)	22.1	20	0.8	0	0	1	Not proposed	0	1	30-50	40	0.6	30-75	50	0.5	0.06	94.00	23.50
Total Nitrogen	3.5	3	0.97	0	0	1	Not proposed	0	1	10-50	30	0.7	30-50	40	0.6	0.10	89.82	22.45
Total Phosphorus	6.8	6	0.94	0	0	1	Not proposed	0	1	10-50	30	0.7	30-50	40	0.6	0.10	90.13	22.53
Hydrocarbons	0	0	1	0	0	1	Not proposed	0	1	10-50	30	0.7	30-50	40	0.6	0.11	89.50	22.38

Hardstand area	Roofwater tanks (50,000 litre storage/ha of roof area)			Rubbish Bins			Gross Polutant Trap (Not Applicable for this Project)			Filter Strip			Inflitration trench			Calculations		
	Pollutant reduction efficiencies based on conceptual model from MUSIC	Average adopted	Load not retained by device	Pollutant reduction efficiencies (BSDCP)	Average adopted	Load not retained by device	Pollutant reduction efficiencies (BSDCP)	Average adopted	Load not retained by device	Pollutant reduction efficiencies (BSDCP)	Average adopted	Load not retained by device	Pollutant reduction efficiencies (BSDCP)	Average adopted	Load not retained by device	Load remaining after treatment (based on 1 unit)	Percentage retained by treatment train	Reduction percentage of catchment
litter	100	0	1	30-75	50	0.5	Not proposed	0	1	30-50	40	0.6	0	0	1	0.23	77.5	58.13
coarse sediment	22.1	20	1	0	0	1	Not proposed	0	1	50-75	60	0.4	30-75	50	0.5	0.15	85.0	63.75
fine sediment(suspended solids)	22.1	20	1	0	0	1	Not proposed	0	1	30-50	40	0.6	30-75	50	0.5	0.23	77.5	58.13
Total Nitrogen	3.5	3	1	0	0	1	Not proposed	0	1	10-50	30	0.7	30-50	40	0.6	0.32	68.5	51.38
Total Phosphorus	6.8	6	1	0	0	1	Not proposed	0	1	10-50	30	0.7	30-50	40	0.6	0.32	68.5	51.38
Hydrocarbons	0	0	1	0	0	1	Not proposed	0	1	10-50	30	0.7	30-50	40	0.6	0.32	68.5	51.38

Summary				
	Roof	Hardstand Area	Total Reduction	BSC Objectives
litter	21.25	58.13	79.38	
coarse sediment	24	63.75	87.75	
fine sediment(suspended solids)	23.5	58.13	81.63	80
Total Nitrogen	22.45375	51.38	73.83	45
Total Phosphorus	22.5325	51.38	73.91	45
Hydrocarbons	22.375	51.38	73.75	