PENRITH CITY COUNCIL

music@link

MUSIC-*link* Report

Project Details		Company Details	
Project:	29-31 Castlereagh Street, Penrith	**Company:**	Zait Engineering Pty Ltd
Report Export Date:	27/04/2017	**Contact:**	Victor Shalala
Catchment Name:	08812 - 29-31 Castlereagh Street Penrith (Rev1)	**Address:**	6/23 Hunt St North Parramatta NSW 2151
Catchment Area:	0.089ha	**Phone:**	0413 598 863
Impervious Area*:	83.14%	**Email:**	david@zait.com.au
Rainfall Station:	67113 PENRITH		
Modelling Time-step:	6 Minutes		
Modelling Period:	1/01/1999 - 31/12/2008 11:54:00 PM		
Mean Annual Rainfall:	691mm		
Evapotranspiration:	1158mm		
MUSIC Version:	6.2.1		
MUSIC-link data Version:	6.22		
Study Area:	Penrith		
Scenario:	Penrith Development		

* takes into account area from all source nodes that link to the chosen reporting node, excluding Import Data Nodes

Treatment Train Effectiveness		Treatment Nodes		Source Nodes	
Node: Receiving Node	**Reduction**	**Node Type**	**Number**	**Node Type**	**Number**
Flow	0.000727%	Sedimentation Basin Node	1	Urban Source Node	3
TSS	85%	Generic Node	1		
TP	78.7%				
TN	51.3%				
GP	100%				

Comments

- Roof node base flow values are as per the MUSIC modelling guidelines which indicate base flow has no effect for impervious areas and therefore no value is needed.

- The 'SF Chamber' detention node has been modified to represent a tank to hold volume for use with the Stormwater360 filter. k values has been set to 1 to prevent the tank from "treating" the flow as it would within a grassed above ground OSD

PENRITH CITY COUNCIL

music@link

Passing Parameters

Node Type	Node Name	Parameter	Min	Max	Actual
Receiving	Receiving Node	% Load Reduction	None	None	0.000727
Receiving	Receiving Node	GP % Load Reduction	90	None	100
Receiving	Receiving Node	TN % Load Reduction	45	None	51.3
Receiving	Receiving Node	TP % Load Reduction	60	None	78.7
Receiving	Receiving Node	TSS % Load Reduction	85	None	85
Sedimentation	SF Chamber 6m²	High Flow Bypass Out (ML/yr)	None	None	0
Urban	Landscape - 147m² (100% Perv.)	Area Impervious (ha)	None	None	0
Urban	Landscape - 147m² (100% Perv.)	Area Pervious (ha)	None	None	0.015
Urban	Landscape - 147m² (100% Perv.)	Total Area (ha)	None	None	0.015
Urban	Road - 402m² (100% Imp.)	Area Impervious (ha)	None	None	0.04
Urban	Road - 402m² (100% Imp.)	Area Pervious (ha)	None	None	0
Urban	Road - 402m² (100% Imp.)	Total Area (ha)	None	None	0.04
Urban	Roof - 337m² (100% Imp.)	Area Impervious (ha)	None	None	0.034
Urban	Roof - 337m² (100% Imp.)	Area Pervious (ha)	None	None	0
Urban	Roof - 337m² (100% Imp.)	Total Area (ha)	None	None	0.034

Only certain parameters are reported when they pass validation

PENRITH CITY COUNCIL

music@link

Failing Parameters

Node Type	Node Name	Parameter	Min	Max	Actual
Sedimentation	SF Chamber 6m^2	Notional Detention Time (hrs)	8	12	0.279
Sedimentation	SF Chamber 6m^2	Total Nitrogen - k (m/yr)	500	500	1
Sedimentation	SF Chamber 6m^2	Total Phosphorus - k (m/yr)	6000	6000	1
Sedimentation	SF Chamber 6m^2	Total Suspended Solids - k (m/yr)	8000	8000	1
Urban	Roof - 337m^2 (100% Imp.)	Baseflow Total Nitrogen Mean (log mg/L)	0.11	0.11	0
Urban	Roof - 337m^2 (100% Imp.)	Baseflow Total Nitrogen Standard Deviation (log mg/L)	0.12	0.12	0
Urban	Roof - 337m^2 (100% Imp.)	Baseflow Total Phosphorus Mean (log mg/L)	-0.85	-0.85	0
Urban	Roof - 337m^2 (100% Imp.)	Baseflow Total Phosphorus Standard Deviation (log mg/L)	0.19	0.19	0
Urban	Roof - 337m^2 (100% Imp.)	Baseflow Total Suspended Solids Mean (log mg/L)	1.2	1.2	0
Urban	Roof - 337m^2 (100% Imp.)	Baseflow Total Suspended Solids Standard Deviation (log mg/L)	0.17	0.17	0

Only certain parameters are reported when they pass validation