

MUSIC-link Report

Project Details		Company Details	
Project:	2-14 Camden St, Penrith	Company:	N.F.BILLYARD PTY LTD
Report Export Date:	13/02/2018	Contact:	Noel Billyard
Catchment Name:	09792 - 2-14 Camden St	Address:	NA
Catchment Area:	0.587ha	Phone:	02 9630 2122
Impervious Area*:	81.60%	Email:	noel@nfbillyard.com
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	-	Sedimentation Basin Node	2	Urban Source Node	7
		GPT Node	2		
TSS	85.9%	Generic Node	2		
TP	69.2%				
TN	45.1%				
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 (sedimentation basin) 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.

Passing Parameters

Node Type	Node Name	Parameter	Min	Max	Actual
GPT	2 x EnviroPod 200 (SFEP USE 2011B)	Hi-flow bypass rate (cum/sec)	None	99	0.04
GPT	8 x EnviroPod 200 (SFEP USE 2011B)	Hi-flow bypass rate (cum/sec)	None	99	0.16
Receiving	Receiving Node	% Load Reduction	None	None	-0.00
Receiving	Receiving Node	GP % Load Reduction	90	None	100
Receiving	Receiving Node	TN % Load Reduction	45	None	45.1
Receiving	Receiving Node	TP % Load Reduction	60	None	69.2
Receiving	Receiving Node	TSS % Load Reduction	85	None	85.9
Sedimentation	SF Chamber (4 m)	High Flow Bypass Out (ML/yr)	None	None	0
Sedimentation	SF Chamber 4m	High Flow Bypass Out (ML/yr)	None	None	0
Urban	Driveway R - 1002m (100% Imp.)	Area Impervious (ha)	None	None	0.1
Urban	Driveway R - 1002m (100% Imp.)	Area Pervious (ha)	None	None	0
Urban	Driveway R - 1002m (100% Imp.)	Total Area (ha)	None	None	0.1
Urban	Driveway R - 569m (100% Imp.)	Area Impervious (ha)	None	None	0.057
Urban	Driveway R - 569m (100% Imp.)	Area Pervious (ha)	None	None	0
Urban	Driveway R - 569m (100% Imp.)	Total Area (ha)	None	None	0.057
Urban	Driveway to chamber R - 310m (100% Imp.)	Area Impervious (ha)	None	None	0.031
Urban	Driveway to chamber R - 310m (100% Imp.)	Area Pervious (ha)	None	None	0
Urban	Driveway to chamber R - 310m (100% Imp.)	Total Area (ha)	None	None	0.031
Urban	Landscape R - 290m (100% Perv.)	Area Impervious (ha)	None	None	0
Urban	Landscape R - 290m (100% Perv.)	Area Pervious (ha)	None	None	0.029
Urban	Landscape R - 290m (100% Perv.)	Total Area (ha)	None	None	0.029
Urban	Landscape R - 790m (100% Perv.)	Area Impervious (ha)	None	None	0
Urban	Landscape R - 790m (100% Perv.)	Area Pervious (ha)	None	None	0.079
Urban	Landscape R - 790m (100% Perv.)	Total Area (ha)	None	None	0.079
Urban	Roof R - 1387m (100% Imp.)	Area Impervious (ha)	None	None	0.139
Urban	Roof R - 1387m (100% Imp.)	Area Pervious (ha)	None	None	0
Urban	Roof R - 1387m (100% Imp.)	Total Area (ha)	None	None	0.139
Urban	Roof R - 1515m (100% Imp.)	Area Impervious (ha)	None	None	0.152
Urban	Roof R - 1515m (100% Imp.)	Area Pervious (ha)	None	None	0
Urban	Roof R - 1515m (100% Imp.)	Total Area (ha)	None	None	0.152

Only certain parameters are reported when they pass validation

NOTE: A successful self-validation check of your model does not constitute an approved model by Penrith City Council
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Failing Parameters					
Node Type	Node Name	Parameter	Min	Max	Actual
Sedimentation	SF Chamber (4 m)	Notional Detention Time (hrs)	8	12	0.17
Sedimentation	SF Chamber (4 m)	Total Nitrogen - k (m/yr)	500	500	1
Sedimentation	SF Chamber (4 m)	Total Phosphorus - k (m/yr)	6000	6000	1
Sedimentation	SF Chamber (4 m)	Total Suspended Solids - k (m/yr)	8000	8000	1
Sedimentation	SF Chamber 4m	Notional Detention Time (hrs)	8	12	0.17
Sedimentation	SF Chamber 4m	Total Nitrogen - k (m/yr)	500	500	1
Sedimentation	SF Chamber 4m	Total Phosphorus - k (m/yr)	6000	6000	1
Sedimentation	SF Chamber 4m	Total Suspended Solids - k (m/yr)	8000	8000	1
Urban	Roof R - 1387m (100% Imp.)	Baseflow Total Nitrogen Mean (log mg/L)	0.11	0.11	0
Urban	Roof R - 1387m (100% Imp.)	Baseflow Total Nitrogen Standard Deviation (log mg/L)	0.12	0.12	0
Urban	Roof R - 1387m (100% Imp.)	Baseflow Total Phosphorus Mean (log mg/L)	-0.85	-0.85	0
Urban	Roof R - 1387m (100% Imp.)	Baseflow Total Phosphorus Standard Deviation (log mg/L)	0.19	0.19	0
Urban	Roof R - 1387m (100% Imp.)	Baseflow Total Suspended Solids Mean (log mg/L)	1.2	1.2	0
Urban	Roof R - 1387m (100% Imp.)	Baseflow Total Suspended Solids Standard Deviation (log mg/L)	0.17	0.17	0
Urban	Roof R - 1515m (100% Imp.)	Baseflow Total Nitrogen Mean (log mg/L)	0.11	0.11	0
Urban	Roof R - 1515m (100% Imp.)	Baseflow Total Nitrogen Standard Deviation (log mg/L)	0.12	0.12	0
Urban	Roof R - 1515m (100% Imp.)	Baseflow Total Phosphorus Mean (log mg/L)	-0.85	-0.85	0
Urban	Roof R - 1515m (100% Imp.)	Baseflow Total Phosphorus Standard Deviation (log mg/L)	0.19	0.19	0
Urban	Roof R - 1515m (100% Imp.)	Baseflow Total Suspended Solids Mean (log mg/L)	1.2	1.2	0
Urban	Roof R - 1515m (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					

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