

ATTACHMENT D

Water Quantity Model Information

Proposed Conditions

- DRAINS Information - Input & Output 100 year & PMF

DRAINS File Path: F:\AA009335\1_LPMW\CV\CLCA-Stormwater\A-DRAINS\MasterPlan_Dev_20_20170321_long duration														
DRAINS Version: DRAINS Version 2016.07														
Modeller's Name: Zhao Hao														
Description: Drainage Modelling for LPMW														
PIT / NODE DETAILS														
Name	Type	Family	Size	Ponding Volume (cu.m)	Pressure Change Coeff. Ku	Surface Elev (m)	Max Pond Depth (m)	Base Inflow (cu.m/s)	Blocking Factor	x	y	Bolt-down lid	id	Part Full Shock Loss
SimtaChann	Node							0		307564.8	6241748.2		65741915	
PR Outlet 5	Node							0		307275.3	6241760.3		65745547	
PR Outlet 7	Node							0		306994	6240655.7		65745549	
PR Georges	Node							0		307599.3	6242582.8		65745606	
PR Out	Node							0		307624.4	6242807.6		65758814	
ABB HW	Headwall				0.5	10.4		0		307786.7	6242075.8		99373831	
PR Outlet 4	Node					4		0		307488.9	6242135.6		65745546	
F/04	OnGrade	Surface Inlet Pits	Unlimited Entry Pit			3	14	0	0.3	308188.1	6241906.4	No	104243165	1 x Ku
F/03	OnGrade	Surface Inlet Pits	Unlimited Entry Pit			2.5	13.4	0	0	308183.2	6242058.6	No	104051864	1 x Ku
F/02	OnGrade	Special	Unlimited			0.3	13.35	0	0	308118.9	6242059.2	No	99128901	1 x Ku
ABB	Node						9.5	0		307850.1	6242067		99128899	
M5	Node							0		308027.7	6242688.2		111515375	
OP OSD6	Sag	Surface Inlet Pits	Unlimited Entry Pit	5	4	11.395		0.5	0	307454.6	6241281.9	No	118686751	1 x Ku
PR Outlet 6	Node						15	0		307082.4	6241198.7		65745548	
OP OSD8	Sag	Surface Inlet Pits	Unlimited Entry Pit	5	4	11.35		0.5	0	307253.3	6240371.1	No	118793370	1 x Ku
PR Outlet 8	Node						9.5	0		306994	6240100.2		65745550	
N1	Node						10	0		307623.3	6240153.1		118844314	
N2	Node						10	0		307482.8	6239806.1		118844315	
N3	Node						10	0		307683.6	6240686.6		118844342	
N4	Node						10	0		307861.4	6240827.1		118844344	
N5	Node						10	0		307966.5	6240969.2		118844346	
N111	Node						10	0		307241.5	6241339.7		118855028	
Moore HW 1	Headwall				0.5	14.15		0		308128	6241692.1		66418818	
Top Channel	Node						14.2	0		308100.9	6241696.6		66354021	
PR DNSDC	OnGrade	Special	DNSDC			0	14	0	0	308299.2	6241833.1	No	66418895	1 x Ku
PR dummy DNSD	Node						20	0		308202.8	6241762		65741985	
S6	Node						10	0		308274.7	6241576.3		66886579	
S5	Node						17	0		308140.5	6241348.3		103017775	
Moore	Node						17	0		308086.9	6241405.2		103017780	
S Rd	Node						10	0		308224.6	6241744.2		115088999	
N MPE ST1	Node						10	0		308083.8	6241532.7		116991893	
S4	Node						17	0		308137.3	6241325.9		118729372	
S3	Node						17	0		308135.7	6241298.7		118729400	
S2	Node						17	0		308133.3	6241269.1		118729401	
S1	Node						17	0		308131.7	6241242.7		118729402	
OutPit 10	Sag	Surface Inlet Pits	Unlimited Entry Pit	5	6	13.7		1	0	308094.9	6241603.9	No	119491582	1 x Ku
N OSD10.1	Node						17	0		308100.9	6241662.1		120207863	
N MPW	Node						17	0		307985.2	6241534.5		119934479	
Pit OSD9	Sag	Surface Inlet Pits	Unlimited Entry Pit	5	6	13.7		1	0	308187	6241669.3	No	121359148	1 x Ku
N OSD9.1	Node						17	0		308167.6	6241670.1		121492535	
N OSD9.2	Node						12	0		308151.9	6241690.5		121492493	
S7	Node						10	0		308297.9	6241663.2		122337612	
PR G05 A	Node							0		307887	6241658.3		133554614	
PR G05 B	Node							0		307897	6241592.7		133554619	
PR G05 C	Node							0		307912.6	6241483.8		133554636	
PR G05 D	Node							0		307871.4	6241402.6		133554637	
PR G05 E	Node							0		307849.2	6241333.7		133554638	
PR G05 F	Node							0		307796.9	6241273.7		133554639	
PR G05 G	Node							0		307805.8	6241464.9		133554640	
PR G05 Total	Node							0		307758.2	6241486.8		133554649	
DETENTION BASIN DETAILS														
Name	Elev	Volume	Not Used	Outlet Type	K	Dia(mm)	Centre RL	Pit Family	Pit Type	x	y	HED	Crest RL	Crest Length
PR OSD 6	11.4	0		None						307637.3	6241095.8	No		
	11.5	2694.11												
	11.6	5388.22												
	11.7	8082.33												
	11.8	10776.4												
	11.9	13470.6												
	12	16164.7												
	12.1	18858.8												
	12.2	21552.9												
	12.3	24247												
	12.4	26941.1												
	12.5	29635.2												
	12.6	32329.3												
	12.7	35023.4												

	12.8	37717.6												
	12.9	40411.7												
	13	43105.8												
	13.1	45799.9												
	13.2	48494												
	13.3	51188.1												
	13.4	53882.2												
	13.5	56576.3												
	13.6	59270.4												
	13.7	61964.6												
	13.8	64658.7												
	13.9	67352.8												
	14	70046.9												
	14.1	72741												
	14.2	75435.1												
	14.3	78129.2												
	14.4	80823.3												
	14.5	83517.4												
	14.6	86211.6												
	14.7	88905.7												
	14.8	91599.8												
	14.9	94293.9												
	15	96988												
PR OSD 5	11.3	0	None							307754.1	6241527	No		
	11.4	1767.36												
	11.5	3563.19												
	11.6	5386.89												
	11.7	7238.38												
	11.8	9117.61												
	11.9	11024.5												
	12	12959.1												
	12.1	14921.3												
	12.2	16911												
	12.3	18928.2												
	12.4	20972.9												
	12.5	23045												
	12.6	25144.4												
	12.7	27271.2												
	12.8	29425.2												
	12.9	31606.4												
	13	33814.8												
	13.1	36050.3												
	13.2	38312.7												
	13.3	40602												
	13.4	42918.1												
	13.5	45261												
	13.6	47630.8												
	13.7	50027.2												
	13.8	52450.5												
	13.9	54900.4												
	14	57377												
	14.1	59880.3												
	14.2	62410.1												

	14.3	64965.3														
	14.4	67542.4														
	14.5	70138.9														
PR OSD 4	11	0	None							308028.6	6242457.3	No				
	11.1	709														
	11.5	3547														
	12	7094														
PR OSD 8	11.75	0	None							307358.5	6240121.3	No				
	11.8	884.544														
	11.9	2653.63														
	12	4422.73														
	12.1	6191.84														
	12.2	7960.95														
	12.3	9730.08														
	12.4	11499.2														
	12.5	13268.4														
	12.6	15037.5														
	12.7	16806.7														
	12.8	18575.9														
	12.9	20345.1														
	13	22114.2														
	13.1	23883.5														
	13.2	25652.7														
	13.3	27421.9														
	13.4	29191.1														
	13.5	30960.3														
	13.6	32729.6														
	13.7	34498.8														
	13.8	36268.1														
	13.9	38037.4														
	14	39806.6														
	14.1	41575.9														
	14.2	43345.2														
	14.3	45114.5														
	14.4	46883.8														
	14.5	48653.1														
	14.6	50422.4														
	14.7	52191.7														
	14.8	53961														
	14.9	55730.3														
	15	57499.6														
	15.1	59268.9														
	15.2	61038.3														
PR OSD 10	13.5	0	None							308086.5	6241574.4	No				
	14.5	11600														
	15.5	23200														
	16.5	34800														
OSD 9	13.5	0	None							308186.1	6241645.3	No				
	14.5	3375														
	15.5	6750														
	16.5	10125														
SUB-CATCHMENT DETAILS																
Name	Pit or Node	Total Area (ha)	Paved Area %	Grass Area %	Supp Area %	Paved Time (min)	Grass Time (min)	Supp Time (min)	Paved Length (m)	Grass Length (m)	Supp Length (m)	Paved Slope (%)	Grass Slope (%)	Supp Slope (%)		
C PR G06	PR OSD 6	2.73	100	0	0	5	5	7	0	0	0					
C PR G05	PR OSD 5	2.79	100	0	0	4	4	0	0	0	0					
C PR G01	PR OSD 4	3.28	100	0	0	5	5	0	0	0	0					
C PR G08	PR OSD 8	1.99	100	0	0	5	5	0	0	0	0					
PR BAPAUME 3	F/04	4.42	55	45	0	7	7	10	0	0	0					
PR BAPAUME 2	F/03	3.55	55	45	0	5	5	7	0	0	0					
PR BAPAUME 1	F/02	2.24	85	15	0	10	10	13	0	0	0					
C ABB	ABB	0.68	100	0	0	4	4	0	0	0	0					

C M5 Intersection	M5		1.1	80	20	0	5		7	0								
C PR G08 D	N1		12.53	100	0	0	10		0	0								
C PR G08 E	N2		11.61	100	0	0	10		0	0								
C PR G06 C	N3		13.46	100	0	0	10		12	0								
C PR G06 B	N4		16.22	100	0	0	10		12	0								
C PR G06 A	N5		17.05	100	0	0	10		12	0								
C PR DNSC	PR DNSDC		4.88	82	18	0	5		5	0								
C S6	S6		6	100	0	0	5		10	0								
C S5	S5		3.51	100	0	0	5		10	0								
C MOORE	Moore		5.4	100	0	0	1		10	0								
C SIMTA RD	S Rd		2.77	100	0	0	5		12	0								
C S4	S4		5.98	100	0	0	5		10	0								
C S3	S3		5.98	100	0	0	5		10	0								
C S2	S2		5.98	100	0	0	5		10	0								
C S1.1	S1		5.15	100	0	0	5		10	0								
MPW Bypass	N MPW		10.03	100	0	0	5		10	0								
C S 7	S7		5.91	100	0	0	5		10	0								
C PR G05 A	PR G05 A		3.22	100	0	0	7		0	0								
C PR G05 B	PR G05 B		3.45	100	0	0	7		0	0								
C PR G05 C	PR G05 C		9.73	100	0	0	8		0	0								
C PR G05 D	PR G05 D		5.26	100	0	0	9		0	0								
C PR G05 E	PR G05 E		13.14	100	0	0	10		0	0								
C PR G05 F	PR G05 F		10.3	100	0	0	11		0	0								
C PR G05 G	PR G05 G		1.98	100	0	0	4		0	0								
PIPE DETAILS																		
Name	From	To	Length (m)	U/S IL (m)	D/S IL (m)	Slope (%)	Type		Dia (mm)	I.D. (mm)	Rough	Pipe Is	No. Pipes	Chg From	At Chg			
P ABB HW	ABB HW	PR Outlet 4	200	9.4	7.4	1	RCP Class 2		600	600	0.3	NewFixed	2	ABB HW	0			
P F/04	F/04	F/03	192.6	12.81	11.33	0.77	Box Culverts		1.2W x 0.6H		0.3	NewFixed	2	F/04	0			
P F/03	F/03	F/02	27.1	11.32	11.13	0.7	Box Culverts		1.2W x 0.6H		0.3	Existing	2	F/03	0			
P F/02	F/02	ABB	229.7	11.11	9.5	0.7	Box Culverts		1.5W x 0.6H		0.3	Existing	2	F/02	0			
PIPE OSD6	OP OSD6	PR Outlet 6	20	8.3	7.1	6	Box Culverts		1.8W x 1.2H		0.3	Existing	2	OP OSD6	0			
Pipe OSD8	OP OSD8	PR Outlet 8	20	9.7	9.5	1	Box Culverts		1.5W x 1.2H		0.3	Existing	2	OP OSD8	0			
P PR UNDER MO	Moore HW 1	Top Channel	18.15	11.58	11.4	0.99	Box Culverts		2W x 1.8H		0.3	Existing	2	Moore HW	0			
P PR dummy DNS	PR DNSDC	PR dummy DNSDC	10	10	9.9	1	RCP Class 2		600	600	0.3	New	1	PR DNSDC	0			
Pipe OutPit 10	OutPit 10	N OSD10.1	140	12.05	11.35	0.5	Box Culverts		1.5W x 1.2H		0.3	Existing	1	OutPit 10	0			
P OSD9	Pit OSD9	N OSD9.1	13	11.645	11.58	0.5	Box Culverts		1.5W x 1.2H		0.3	Existing	1	Pit OSD9	0			
DETAILS of SERVICES CROSSING PIPES																		
Pipe	Chg (m)	Bottom Elev (m)	Height of Service (m)	Chg (m)	Bottom Elev (m)	Height of S (m)	Chg (m)		Bottom Elev (m)	Height of S (m)	etc							
CHANNEL DETAILS																		
Name	From	To	Type	Length (m)	U/S IL (m)	D/S IL (m)	Slope (%)		Base Width (m)	L.B. Slope (1:?)	R.B. Slope (1:?)	Manning n	Depth (m)	Roofed				
OVERFLOW ROUTE DETAILS																		
Name	From	To	Travel Time (min)	Spill Level (m)	Crest Length (m)	Weir Coeff. C	Cross Section		Safe Depth Major Storm (m)	SafeDepth Minor Storm (m)	Safe DxV (sq.m/sec)	Bed Slope (%)	D/S Area Contributing %	id				
F EX G03	SimtaChann	PR Outlet 5	0.1				Dummy used to model flow across r		0.2	0.05	0.6	1	0	65745592				
F PR Outlet 5	PR Outlet 5	PR Outlet 4	3				Dummy used to model flow across r		0.2	0.05	0.6	1	0	65745585				
PR F Outlet 7	PR Outlet 7	PR Outlet 6	3				Dummy used to model flow across r		0.2	0.05	0.6	1	0	65745587				
F PR Georges	PR Georges	PR Out	0.1				Dummy used to model flow across r		0.2	0.05	0.6	1	0	65760256				
F PR G06	PR OSD 6	OP OSD6	0.1	11.4			Really Long Weir		0.3	0.3	0.6	1	0	65751725				
F PR G05	PR OSD 5	SimtaChann	0.1	11.3			Really Long Weir		0.3	0.3	0.6	1	0	65751709				

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DRAINS Version:		DRAINS Version 2016.07									
Modeller's Name:		Zhao Hao									
Description:		Drainage Modelling for LPMW									
DRAINS results prepared from Version 2017.06											
PIT / NODE DETAILS										RESULTS 100 YEAR ARI	
Version 8											
Name	Max HGL	Max Pond HGL	Max Surface Flow Arriving (cu.m/s)	Max Pond Volume (cu.m)	Min Freeboard (m)	Overflow (cu.m/s)	Constraint				
ABB HW	10.81		4.708		-0.41	5.442	Headwall height/system capacity				
PR Outlet 4	10.6		13.413								
F/04	13.63		2.033		0.37	0	None				
F/03	12.7		1.799		0.7	0	None				
F/02	11.88		1.014		1.47	0	None				
ABB	10.7		0.423								
OP OSD6	11.02	11.66	2.308	1.5	0.37	0	Inlet Capacity				
PR Outlet 6	11		0.762								
OP OSD8	11.41	11.53	0.762	0.9	0	0	Outlet System				
PR Outlet 8	11.4		0								
Moore HW 1	13.52		4.431		0.63	0	None				
Top Channel	13.36		3.078								
PR DNSDC	11.29		2.684		2.71	0.574	Inlet Capacity				
PR dummy D	10.48		0								
OutPit 10	13.39	14.03	3.078	0.8	0.31	0	Inlet Capacity				
N OSD10.1	11.98		0								
Pit OSD9	12.23	13.84	0.897	0.3	1.47		Inlet Capacity				
N OSD9.1	11.85		0								
SUB-CATCHMENT DETAILS											
Name	Max Flow Q (cu.m/s)	Paved Max Q (cu.m/s)	Grassed Max Q (cu.m/s)	Paved Tc (min)	Grassed Tc (min)	Supp. Tc (min)	Due to Storm				
C PR G06	1.608	1.608	0	5	7	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
C PR G05	1.737	1.737	0	4	0	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
C PR G01	1.932	1.932	0	5	0	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
C PR G08	1.172	1.172	0	5	0	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
PR BAPAUM	2.033	1.23	0.803	7	10	0	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1				
PR BAPAUM	1.799	1.101	0.698	5	7	0	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1				
PR BAPAUM	1.014	0.906	0.114	10	13	0	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1				
C ABB	0.423	0.423	0	4	0	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
C M5 Intersec	0.592	0.496	0.096	5	7	0	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1				
C PR G08 D	5.964	5.964	0	10	0	0	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1				
C PR G08 E	5.526	5.526	0	10	0	0	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1				
C PR G06 C	6.406	6.406	0	10	12	0	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1				
C PR G06 B	7.72	7.72	0	10	12	0	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1				
C PR G06 A	8.115	8.115	0	10	12	0	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1				
C PR DNSC	2.684	2.256	0.428	5	5	0	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1				
C S6	3.535	3.535	0	5	10	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
C S5	2.068	2.068	0	5	10	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
C MOORE	3.361	3.361	0	1	10	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
C SIMTA RD	1.632	1.632	0	5	12	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
C S4	3.523	3.523	0	5	10	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
C S3	3.523	3.523	0	5	10	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
C S2	3.523	3.523	0	5	10	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
C S1.1	3.034	3.034	0	5	10	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
MPW Bypass	5.909	5.909	0	5	10	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
C S 7	3.482	3.482	0	5	10	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
C PR G05 A	1.661	1.661	0	7	0	0	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1				
C PR G05 B	1.78	1.78	0	7	0	0	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1				
C PR G05 C	4.873	4.873	0	8	0	0	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1				
C PR G05 D	2.573	2.573	0	9	0	0	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1				
C PR G05 E	6.254	6.254	0	10	0	0	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1				
C PR G05 F	4.72	4.72	0	11	0	0	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1				
C PR G05 G	1.232	1.232	0	4	0	0	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1				
Outflow Volumes for Total Catchment (197 impervious + 5.02 pervious = 202 total ha)											
Storm	Total Rainfall (cu.m)	Total Runoff (cu.m)	Impervious Runoff (cu.m)	Pervious Runoff (cu.m)							
AR&R 100 ye	37779.89	35340.63 (93.5%)	34869.36 (94.7%)	471.27 (50.3%)							
AR&R 100 ye	72809.92	70180.88 (96.3%)	69029.92 (97.3%)	1150.96 (63.7%)							
AR&R 100 ye	94716.12	91931.88 (97.1%)	90392.48 (97.5%)	1539.39 (65.5%)							
AR&R 100 ye	124607.2	121592.66 (97.6%)	119541.98 (98.4%)	2050.67 (66.3%)							
AR&R 100 ye	141109.81	137965.86 (97.8%)	135634.69 (98.3%)	2331.17 (66.6%)							
AR&R 100 ye	166607.17	163256.95 (98.0%)	160499.58 (98.2%)	2757.37 (66.7%)							
AR&R 100 ye	186493.53	182979.88 (98.1%)	179897.28 (98.3%)	3082.59 (66.6%)							
AR&R 100 ye	282823.19	278202.81 (98.3%)	273832.00 (98.4%)	4370.82 (62.3%)							
AR&R 100 ye	331288.91	325859.44 (98.4%)	321092.31 (98.4%)	4767.11 (58.0%)							
AR&R 100 ye	372106.94	366190.16 (98.4%)	360903.56 (98.4%)	5286.59 (57.2%)							
AR&R 100 ye	440713.75	433464.44 (98.4%)	427797.25 (98.4%)	5667.20 (51.8%)							
AR&R 100 ye	498192.75	489622.63 (98.3%)	483834.63 (98.3%)	5787.99 (46.8%)							
PIPE DETAILS											
Name	Max Q (cu.m/s)	Max V (m/s)	Max U/S HGL (m)	Max D/S HGL (m)	Due to Storm						
P ABB HW	1.153	2.04	10.63	10.6	AR&R 100 year, 18 hours storm, average 12.1 mm/h, Zone 1						
P F/04	2.123	2.96	13.109	12.699	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1						
P F/03	3.424	2.38	12.003	11.882	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1						
P F/02	4.386	2.44	11.798	10.7	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1						

PIPE_OSD6	2.31	0.53	11.006	11	AR&R 100 year, 18 hours storm, average 12.1 mm/h, Zone 1				
Pipe_OSD8	0.762	0.21	11.403	11.4	AR&R 100 year, 18 hours storm, average 12.1 mm/h, Zone 1				
P PR UNDER	4.466	0.62	13.376	13.36	AR&R 100 year, 1.5 hours storm, average 54.9 mm/h, Zone 1				
P PR dummy	2.118	7.49	11.294	10.5	AR&R 100 year, 1.5 hours storm, average 54.9 mm/h, Zone 1				
Pipe OutPit 10	3.078	3.26	12.679	11.979	AR&R 100 year, 2 hours storm, average 46.1 mm/h, Zone 1				
P OSD9	0.897	2.25	11.911	11.846	AR&R 100 year, 9 hours storm, average 18.2 mm/h, Zone 1				
CHANNEL DETAILS									
Name	Max Q	Max V	Due to Storm						
	(cu.m/s)	(m/s)							
OVERFLOW ROUTE DETAILS									
Name	Max Q U/S	Max Q D/S	Safe Q	Max D	Max DxV	Max Width	Max V	Due to Storm	
F EX G03	7.867	7.867	7.665	0.203	0.33	44.5	1.62	AR&R 100 year, 1.5 hours storm, average 54.9 mm/h, Zone 1	
F PR Outlet 5	10.444	10.444	7.665	0.227	0.4	49.35	1.74	AR&R 100 year, 9 hours storm, average 18.2 mm/h, Zone 1	
PR F Outlet 7	0.762	0.762	7.665	0.078	0.07	19.54	0.89	AR&R 100 year, 18 hours storm, average 12.1 mm/h, Zone 1	
F PR Georges	13.785	13.785	7.665	0.23	0.52	49.99	2.24	AR&R 100 year, 1.5 hours storm, average 54.9 mm/h, Zone 1	
F PR G06	2.308	2.308	420.738	0.011	0	699.9	0.31	AR&R 100 year, 12 hours storm, average 15.3 mm/h, Zone 1	
F PR G05	3.091	3.091	420.738	0.013	0	699.9	0.35	AR&R 100 year, 9 hours storm, average 18.2 mm/h, Zone 1	
F PR G01	0.282	0.282	420.738	0.003	0	699.9	0.15	AR&R 100 year, 9 hours storm, average 18.2 mm/h, Zone 1	
F ABB HW	5.442	5.442	7.665	0.174	0.26	38.75	1.49	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1	
F PR Outlet 4	13.785	13.785	7.665	0.23	0.52	49.99	2.24	AR&R 100 year, 1.5 hours storm, average 54.9 mm/h, Zone 1	
F G08 Outlet	0.762	0.762	420.738	0.005	0	699.9	0.21	AR&R 100 year, 18 hours storm, average 12.1 mm/h, Zone 1	
F F/04	0	0	7.665	0	0	0	0		
F F/03	0	0	7.665	0	0	0	0		
F F/02	0	0	7.665	0	0	0	0		
F EX G02	4.708	4.708	7.665	0.164	0.24	36.78	1.43	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1	
Dummy	0	0	420.738	0	0	0	0		
F PR Outlet 6	3.053	3.053	420.738	0.013	0	699.9	0.35	AR&R 100 year, 12 hours storm, average 15.3 mm/h, Zone 1	
F OP_OSD8	0	0	7.665	0	0	0	0		
PR F Outlet 8	0.762	0.762	7.665	0.078	0.07	19.54	0.89	AR&R 100 year, 18 hours storm, average 12.1 mm/h, Zone 1	
F PR G08 D	5.964	5.964	7.665	0.181	0.27	40.19	1.51	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1	
F PR G08 E	5.526	5.526	7.665	0.176	0.26	39.11	1.48	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1	
F PR G06 C	6.406	6.406	7.665	0.186	0.29	41.27	1.54	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1	
F PR G06 B	7.72	7.72	7.665	0.201	0.32	44.14	1.62	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1	
F PR G06 A	8.115	8.115	7.665	0.204	0.34	44.86	1.65	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1	
F N111	0	0	7.665	0	0	0	0		
F PR OVER N	0	0	7.665	0	0	0	0		
Channel	6.898	6.898	0.452	1.357	2.34	4.24	1.72	AR&R 100 year, 1.5 hours storm, average 54.9 mm/h, Zone 1	
F PR DNSDC	0.574	0.574	7.665	0.07	0.06	17.92	0.82	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1	
F PR dummy	2.118	2.118	19.683	0.119	0.14	27.8	1.16	AR&R 100 year, 1.5 hours storm, average 54.9 mm/h, Zone 1	
F S6	3.535	3.535	7.665	0.146	0.19	33.19	1.33	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1	
F S5	2.068	2.068	7.665	0.117	0.14	27.44	1.16	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1	
F Moore	3.361	3.361	7.665	0.143	0.19	32.65	1.31	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1	
F S RD 1	1.632	1.632	7.665	0.106	0.12	25.28	1.09	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1	
F MPE ST1	19.032	19.032	19.683	0.23	0.71	49.99	3.1	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1	
F S4	3.523	3.523	7.665	0.146	0.19	33.19	1.33	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1	
F S3	3.523	3.523	7.665	0.146	0.19	33.19	1.33	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1	
F S2	3.523	3.523	7.665	0.146	0.19	33.19	1.33	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1	
F S1	3.034	3.034	7.665	0.137	0.18	31.39	1.28	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1	
F OutPit 10	0	0	7.665	0	0	0	0		
F OSD10.3	3.078	3.078	7.665	0.138	0.18	31.57	1.29	AR&R 100 year, 2 hours storm, average 46.1 mm/h, Zone 1	
F MPW	5.909	5.909	7.665	0.18	0.27	40.01	1.51	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1	
F OSD9.2	0.897	0.897	7.665	0.083	0.08	20.61	0.93	AR&R 100 year, 9 hours storm, average 18.2 mm/h, Zone 1	
F OSD9	4.431	4.431	7.665	0.16	0.23	36.06	1.41	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1	
F S7	3.482	3.482	7.665	0.145	0.19	33.01	1.33	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1	
F OSD10.1	3.078	3.078	420.738	0.013	0	699.9	0.35	AR&R 100 year, 2 hours storm, average 46.1 mm/h, Zone 1	
F OSD9.1	0.897	0.897	420.738	0.006	0	699.9	0.22	AR&R 100 year, 9 hours storm, average 18.2 mm/h, Zone 1	
F PR G05 A	1.661	1.661	7.665	0.107	0.12	25.46	1.09	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1	
F PR G05 B	1.78	1.78	7.665	0.11	0.12	26	1.12	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1	
F PR G05 C	4.873	4.873	7.665	0.167	0.24	37.32	1.44	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1	
F PR G05 D	2.573	2.573	7.665	0.129	0.16	29.77	1.22	AR&R 100 year, 15 minutes storm, average 144 mm/h, Zone 1	
F PR G05 E	6.254	6.254	7.665	0.185	0.28	40.91	1.53	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1	
F PR G05 F	4.72	4.72	7.665	0.165	0.23	36.96	1.42	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1	
F PR G05 G	1.232	1.232	7.665	0.095	0.1	22.95	1.01	AR&R 100 year, 5 minutes storm, average 224 mm/h, Zone 1	
F PR G05 Tot	22.776	22.776	7.665	0.23	0.85	49.99	3.7	AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1	
DETENTION BASIN DETAILS									
Name	Max WL	MaxVol	Max Q	Max Q	Max Q				
			Total	Low Level	High Level				
PR OSD 6	13.41	54085.1	2.308	0	2.308				
PR OSD 5	13.38	42444.2	3.091	0	3.091				
PR OSD 4	11.48	3402	0.282	0	0.282				
PR OSD 8	13.62	33106.2	0.762	0	0.762				
PR OSD 10	15.56	23951.7	3.078	0	3.078				
OSD 9	15.87	7985.8	0.897	0	0.897				
CONTINUITY CHECK for AR&R 100 year, 25 minutes storm, average 112 mm/h, Zone 1									
Node	Inflow	Outflow	Storage Chan	Difference					
	(cu.m)	(cu.m)	(cu.m)	%					
SimtaChann	23212.78	23198.91	0	0.1					
PR Outlet 5	27382.27	27364.13	0	0.1					
PR Outlet 7	1527.57	1526.06	0	0.1					
PR Georges	28639.45	28620.4	0	0.1					
PR Out	28601.29	28601.29	0	0					
PR OSD 6	22660.1	2846.98	19814.49	0					
PR OSD 5	22847.99	5673.53	17177.04	0					
PR OSD 4	1502.73	0	1502.73	0					
ABB HW	4391.22	2267.35	0	48.4					
PR Outlet 4	29030.35	29012.12	0	0.1					
PR OSD 8	11971.46	1576.11	10396.1	0					
F/04	1720.21	1720.83	0	0					
F/03	3107.03	3105.28	0	0.1					
F/02	4079.1	4078.83	0	0					
ABB	4390.37	4390.51	0	0					

M5	470.88	470.88	0	0									
OP_OSD6	2844.24	2848.22	0.4	-0.2									
PR Outlet 6	4328.95	4324.71	0	0.1									
OP_OSD8	1574.61	1574.34	0.5	0									
PR Outlet 8	1574.34	1572.84	0	0.1									
N1	5740.62	5740.62	0	0									
N2	5319.12	5319.12	0	0									
N3	6166.7	6166.7	0	0									
N4	7431.2	7431.2	0	0									
N5	7811.46	7811.46	0	0									
N111	0	0	0	0									
Moore HW 1	5418.07	5725.83	0	-5.7									
Top Channel	17943.74	17936.6	0	0									
PR DNSDC	2105.4	2106.75	0	-0.1									
PR dummy D	2033.21	2033.21	0	0									
S6	2748.9	2748.9	0	0									
S5	1608.11	1608.11	0	0									
Moore	2474.01	2474.01	0	0									
S Rd	1269.08	1269.08	0	0									
N MPE ST1	14660.78	14660.81	0	0									
S4	2739.74	2739.74	0	0									
S3	2739.74	2739.74	0	0									
S2	2739.74	2739.74	0	0									
S1	2359.47	2359.47	0	0									
OutPit 10	12261.3	12228.37	0.3	0.3									
N OSD10.1	12228.37	12223.15	0	0									
N MPW	4595.24	4595.24	0	0									
Pit OSD9	2051.26	2048.17	0.13	0.1									
N OSD9.1	2048.17	2046.69	0	0.1									
N OSD9.2	5421.03	5419.55	0	0									
S7	2707.67	2707.67	0	0									
PR OSD 10	19256.06	12266.39	6992.21	0									
OSD 9	5456.57	2052.74	3404.57	0									
PR G05 A	1475.24	1475.24	0	0									
PR G05 B	1580.62	1580.62	0	0									
PR G05 C	4457.8	4457.8	0	0									
PR G05 D	2409.87	2409.87	0	0									
PR G05 E	6020.09	6020.09	0	0									
PR G05 F	4718.94	4718.94	0	0									
PR G05 G	907.14	907.14	0	0									
PR G05 Total	21569.69	21569.7	0	0									

Run Log for MasterPlan_Dev_20_20170321_long duration run at 15:59:38 on 22/3/2017

Upwelling occurred at OP_OSD8

The maximum flow in the following overflow routes is unsafe: F PR G05 Total, F PR G06 B, F PR G06 A, F PR Georges, F PR Outlet 4, F EX G03, Channel, F PR Outlet 5

The following overflow routes carried water uphill (adding energy): F OSD9.1 F OSD10.1 F PR G06 F PR G05 F PR G01 F G08 Outlet 1

These results may be invalid. You should check for water flowing round in circles at these locations. You may need to reformulate the model.

DRAINS File Path:	F:\AA009335\1_LPMW\CV\CLCA-Stormwater\A-DRAINS\MasterPlan_Dev_20_20170321_long duration
DRAINS Version:	DRAINS Version 2016.07
Modeller's Name:	Zhao Hao
Description:	Drainage Modelling for LPMW

DRAINS results prepared from Version 2017.06

PIT / NODE DETAILS								RESULTS PMF YEAR ARI
Name	Max HGL	Max Pond HGL	Max Surface Flow Arriving (cu.m/s)	Max Pond Volume (cu.m)	Min Freeboard (m)	Overflow (cu.m/s)	Constraint	
ABB HW	11.28		21.544		-0.88	19.723	Headwall height/system capacity	
PR Outlet 4	4		175.626					
F/04	14.01		9.763		0	7.402	Outlet System	
F/03	13.4		15.075		0	13.53	Outlet System	
F/02	13.33		18.23		0.02	13.178	Inlet Capacity	
ABB	10.1		14.462					
OP OSD6	9.25	11.89	64.131	4.3	2.14	58.262	Inlet Capacity	
PR Outlet 6	7.33		86.095					
OP OSD8	10.86	11.85	30.112	4.3	0.49	24.243	Inlet Capacity	
PR Outlet 8	9.99		0					
Moore HW 1	14.5		19.436		-0.35	29.401	Headwall height/system capacity	
Top Channel	14.5		32.486					
PR DNSDC	11.36		11.977		2.64	9.867	Inlet Capacity	
PR dummy DNS	10.48		0					
OutPit 10	13.98	14.7	9.742	4.3	0	5.824	Outlet System	
N OSD10.1	12.11		5.824					
Pit OSD9	12.92	14.01	2.869	0.7	0.78		Inlet Capacity	
N OSD9.1	12.18		0					
SUB-CATCHMENT DETAILS								
Name	Max Flow Q (cu.m/s)	Paved Max Q (cu.m/s)	Grassed Max Q (cu.m/s)	Paved Tc (min)	Grassed Tc (min)	Supp. Tc (min)	Due to Storm	
C PR G06	6.791	6.791	0	5	7	0	15min PMP	
C PR G05	6.959	6.959	0	4	0	0	15min PMP	
C PR G01	8.159	8.159	0	5	0	0	15min PMP	
C PR G08	4.95	4.95	0	5	0	0	15min PMP	
PR BAPAUME 3	9.763	5.815	4.349	7	10	0	15min PMP	
PR BAPAUME 2	8.213	4.857	3.663	5	7	0	15min PMP	
PR BAPAUME 1	4.956	4.396	0.639	10	13	0	15min PMP	
C ABB	1.696	1.696	0	4	0	0	15min PMP	
C M5 Intersect	2.559	2.189	0.504	5	7	0	15min PMP	
C PR G08 D	28.93	28.93	0	10	0	0	15min PMP	
C PR G08 E	26.806	26.806	0	10	0	0	15min PMP	
C PR G06 C	31.077	31.077	0	10	12	0	15min PMP	
C PR G06 B	37.45	37.45	0	10	12	0	15min PMP	
C PR G06 A	39.366	39.366	0	10	12	0	15min PMP	
C PR DNSC	11.977	9.954	2.091	5	5	0	15min PMP	
C S6	14.926	14.926	0	5	10	0	15min PMP	
C S5	8.732	8.732	0	5	10	0	15min PMP	
C MOORE	13.47	13.47	0	1	10	0	15min PMP	
C SIMTA RD	6.891	6.891	0	5	12	0	15min PMP	
C S4	14.876	14.876	0	5	10	0	15min PMP	
C S3	14.876	14.876	0	5	10	0	15min PMP	
C S2	14.876	14.876	0	5	10	0	15min PMP	
C S1.1	12.811	12.811	0	5	10	0	15min PMP	
MPW Bypass	24.951	24.951	0	5	10	0	15min PMP	
C S 7	14.702	14.702	0	5	10	0	15min PMP	
C PR G05 A	7.702	7.702	0	7	0	0	15min PMP	
C PR G05 B	8.252	8.252	0	7	0	0	15min PMP	
C PR G05 C	22.983	22.983	0	8	0	0	15min PMP	
C PR G05 D	12.302	12.302	0	9	0	0	15min PMP	
C PR G05 E	30.338	30.338	0	10	0	0	15min PMP	
C PR G05 F	22.574	22.574	0	11	0	0	15min PMP	
C PR G05 G	4.939	4.939	0	4	0	0	15min PMP	
Outflow Volumes for Total Catchment (197 impervious + 5.02 pervious = 202 total ha)								
Storm	Total Rainfall (cu.m)	Total Runoff (cu.m)	Impervious Runoff (cu.m)	Pervious Runoff (cu.m)				
15min PMP	343944.06	341301.34 (99.2%)	333435.50 (99.2%)	7865.83 (92.2%)				
30min PMP	505800.09	502936.03 (99.4%)	491274.00 (99.4%)	11662.04 (92.9%)				
45min PMP	627192.13	624166.94 (99.5%)	609656.13 (99.5%)	14510.79 (93.2%)				
1hr PMP	728183.44	725033.69 (99.4%)	708146.00 (99.4%)	16887.68 (93.5%)				
1.5hr PMP	829343.44	825978.56 (99.6%)	806783.00 (99.6%)	19195.59 (93.3%)				
2hr PMP	910440.13	906921.81 (99.6%)	885885.63 (99.6%)	21036.19 (93.1%)				
2.5hr PMP	971136.13	967445.88 (99.6%)	945060.75 (99.6%)	22385.13 (92.9%)				
3hr PMP	1032337.94	1028488.25 (99.6%)	1004736.75 (99.6%)	23751.53 (92.7%)				
4hr PMP	1112760.13	1108615.63 (99.6%)	1083171.00 (99.6%)	25444.61 (92.1%)				
5hr PMP	1213920.25	1209489.88 (99.6%)	1181833.88 (99.6%)	27656.02 (91.8%)				
PIPE DETAILS								
Name	Max Q (cu.m/s)	Max V (m/s)	Max U/S HGL (m)	Max D/S HGL (m)	Due to Storm			
P ABB HW	1.831	3.3	11.01	7.971	15min PMP			
P F/04	2.511	1.74	13.901	13.4	4hr PMP			
P F/03	4.641	3.22	13.286	13.329	1hr PMP			
P F/02	7.358	4.09	13.12	10.1	45min PMP			
PIPE OSD6	6.243	7.51	8.546	7.331	15min PMP			
Pipe OSD8	6.111	4.18	10.214	9.987	1hr PMP			

P PR UNDER M	0	0	14.5	14.5	15min PMP						
F PR dummy D	2.175	7.69	11.356	10.5	15min PMP						
Pipe OutPit 10	3.99	3.48	12.824	12.115	15min PMP						
P OSD9	2.869	3.2	12.242	12.177	3hr PMP						
CHANNEL DETAILS											
Name	Max Q	Max V			Due to Storm						
	(cu.m/s)	(m/s)									
OVERFLOW ROUTE DETAILS											
Name	Max Q U/S	Max Q D/S	Safe Q	Max D	Max DxV	Max Width	Max V	Due to Storm			
F EX G03	101.73	101.73	0.256	0.23	3.81	49.99	16.55	30min PMP			
F PR Outlet 5	164.957	164.957	0.256	0.23	6.17	49.99	26.83	45min PMP			
PR F Outlet 7	30.112	30.112	0.256	0.23	1.13	49.99	4.9	45min PMP			
F PR Georges	180.79	180.79	0.256	0.23	6.76	49.99	29.41	45min PMP			
F PR G06	64.131	64.131	420.738	0.077	0.09	699.9	1.2	30min PMP			
F PR G05	76.577	76.577	420.738	0.085	0.11	699.9	1.29	30min PMP			
F PR G01	2.419	2.419	420.738	0.011	0	699.9	0.32	1hr PMP			
F ABB HW	19.723	19.723	0.256	0.23	0.74	49.99	3.21	15min PMP			
F PR Outlet 4	178.537	178.537	0.256	0.23	6.68	49.99	29.04	45min PMP			
F G08 Outlet 1	30.112	30.112	420.738	0.049	0.04	699.9	0.89	45min PMP			
F F/04	7.402	7.402	0.256	0.197	0.32	43.42	1.6	15min PMP			
F F/03	13.53	13.53	0.256	0.23	0.51	49.99	2.2	15min PMP			
F F/02	13.178	13.178	0.256	0.23	0.49	49.99	2.14	15min PMP			
F EX G02	21.544	21.544	0.256	0.23	0.81	49.99	3.5	15min PMP			
Dummy	58.262	58.262	420.738	0.072	0.08	699.9	1.15	30min PMP			
F PR Outlet 6	87.862	87.862	420.738	0.092	0.13	699.9	1.36	45min PMP			
F OP OSD8	24.243	24.243	0.256	0.23	0.91	49.99	3.94	45min PMP			
PR F Outlet 8	6.111	6.111	0.256	0.183	0.28	40.55	1.52	1hr PMP			
F PR G08 D	28.93	28.93	0.256	0.23	1.08	49.99	4.71	15min PMP			
F PR G08 E	26.806	26.806	0.256	0.23	1	49.99	4.36	15min PMP			
F PR G06 C	31.077	31.077	0.256	0.23	1.16	49.99	5.06	15min PMP			
F PR G06 B	37.45	37.45	0.256	0.23	1.4	49.99	6.09	15min PMP			
F PR G06 A	39.366	39.366	0.256	0.23	1.47	49.99	6.4	15min PMP			
F N111	58.262	58.262	0.256	0.23	2.18	49.99	9.48	30min PMP			
F PR OVER MO	29.401	29.401	0.256	0.23	1.1	49.99	4.78	15min PMP			
Channel	27.599	27.599	0.452	2.404	2.47	120	1.03	15min PMP			
F PR DNSDC	9.867	9.867	0.256	0.221	0.38	48.27	1.72	15min PMP			
F PR dummy D	2.175	2.175	19.683	0.12	0.14	27.98	1.17	15min PMP			
F S6	14.926	14.926	0.256	0.23	0.56	49.99	2.43	15min PMP			
F S5	8.732	8.732	0.256	0.211	0.35	46.12	1.67	15min PMP			
F Moore	13.47	13.47	0.256	0.23	0.5	49.99	2.19	15min PMP			
F S RD 1	6.891	6.891	0.256	0.192	0.3	42.35	1.57	15min PMP			
F MPE ST1	79.456	79.456	19.683	0.23	2.97	49.99	12.92	15min PMP			
F S4	14.876	14.876	0.256	0.23	0.56	49.99	2.42	15min PMP			
F S3	14.876	14.876	0.256	0.23	0.56	49.99	2.42	15min PMP			
F S2	14.876	14.876	0.256	0.23	0.56	49.99	2.42	15min PMP			
F S1	12.811	12.811	0.256	0.23	0.48	49.99	2.08	15min PMP			
F OutPit 10	5.824	5.824	0.256	0.179	0.27	39.83	1.51	3hr PMP			
F OSD10.3	9.742	9.742	0.256	0.22	0.38	48.09	1.71	3hr PMP			
F MPW	24.951	24.951	0.256	0.23	0.93	49.99	4.06	15min PMP			
F OSD9.2	2.869	2.869	0.256	0.134	0.17	30.85	1.26	3hr PMP			
F OSD9	19.436	19.436	0.256	0.23	0.73	49.99	3.16	15min PMP			
F S7	14.702	14.702	0.256	0.23	0.55	49.99	2.39	15min PMP			
F OSD10.1	9.742	9.742	420.738	0.025	0.01	699.9	0.56	3hr PMP			
F OSD9.1	2.869	2.869	420.738	0.012	0	699.9	0.34	3hr PMP			
F PR G05 A	7.702	7.702	0.256	0.201	0.32	44.14	1.61	15min PMP			
F PR G05 B	8.252	8.252	0.256	0.206	0.34	45.22	1.65	15min PMP			
F PR G05 C	22.983	22.983	0.256	0.23	0.86	49.99	3.74	15min PMP			
F PR G05 D	12.302	12.302	0.256	0.23	0.46	49.99	2	15min PMP			
F PR G05 E	30.338	30.338	0.256	0.23	1.13	49.99	4.94	15min PMP			
F PR G05 F	22.574	22.574	0.256	0.23	0.84	49.99	3.67	15min PMP			
F PR G05 G	4.939	4.939	0.256	0.167	0.24	37.5	1.45	15min PMP			
F PR G05 Total	105.503	105.503	0.256	0.23	3.95	49.99	17.16	15min PMP			
DETENTION BASIN DETAILS											
Name	Max WL	MaxVol	Max Q	Max Q	Max Q						
			Total	Low Level	High Level						
PR OSD 6	14.27	77294.5	64.131	0	64.131						
PR OSD 5	14.11	60017.4	76.577	0	76.577						
PR OSD 4	12.05	7431.2	2.419	0	2.419						
PR OSD 8	14.58	50008.8	30.112	0	30.112						
PR OSD 10	25.73	141851.7	9.742	0	9.742						
OSD 9	25.31	39873.1	2.869	0	2.869						
CONTINUITY CHECK for 15min PMP											
Node	Inflow	Outflow	Storage Change	Difference							
	(cu.m)	(cu.m)	(cu.m)	%							
SimtaChann	101360.53	101323.22	0	0							
PR Outlet 5	141406.81	141367.91	0	0							
PR Outlet 7	7103.3	7098.48	0	0.1							
PR Georges	158529.69	158472.88	0	0							
PR Out	158374.23	158374.23	0	0							
PR OSD 6	83587.45	33801.93	49792.09	0							
PR OSD 5	84280.32	51217.28	33070.02	0							
PR OSD 4	5543.2	2538.13	3005.42	0							
ABB HW	17899.29	17899.56	0	0							
PR Outlet 4	157345.64	157289.8	0	0							
PR OSD 8	44159.69	7266.82	36895.28	0							
F/04	7218.79	7219.04	0	0							
F/03	13024.49	13017.54	0	0.1							
F/02	16759.08	16750.17	0	0.1							
ABB	17899.38	17899.29	0	0							
M5	1832.28	1832.28	0	0							
OP OSD6	33788.67	33771.43	1.42	0							

