TOBIN

Mechanics Workshop at Athenry Fire Station

Engineering Planning Report

BUILT ON KNOWLEDGE

Document Control Sheet	
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Project Reference	12084

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P0	Issue for Planning	SB	02/03/2026	MG	02/03/2026	MG	02/03/2026

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Appendices

1. INTRODUCTION

1.1 BACKGROUND

TOBIN were engaged by Galway County Council to provide civil engineering consultancy services for the construction of a Mechanics Workshop located at Athenry Fire Station Co. Galway. This report was prepared to accompany the planning application for the proposed development and deals specifically with the surface water drainage, wastewater, water supply, traffic and structural engineering for this development.

The development will consist of the following;

a) The construction of a mechanical workshop.

b) All ancillary and associated site infrastructure and site works.

The site location and proposed development layout are presented below.

Figure 1- 1 – Site Location Map

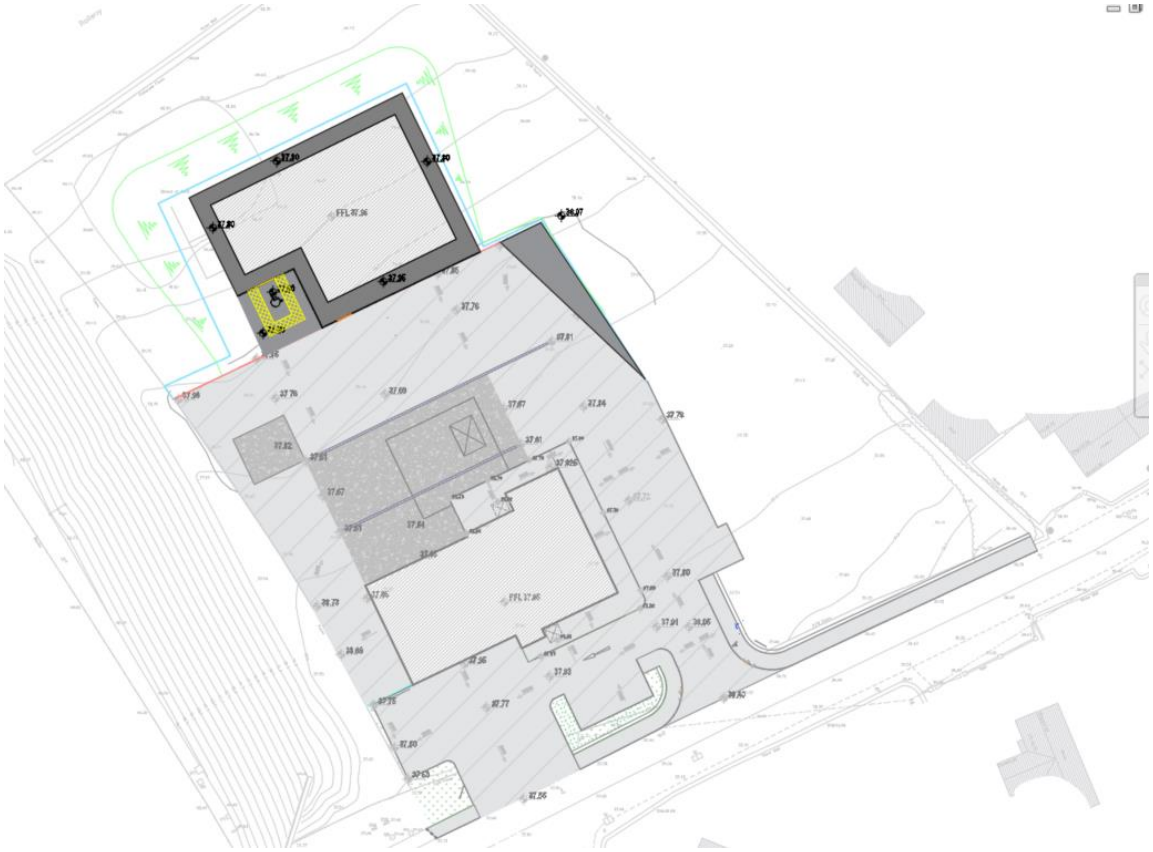

Figure 1- 2 – Proposed Site Layout

The existing vehicular access to the south will be maintained. All internal roads have been designed in accordance with the requirements of Design Manual for Urban Roads and Streets.

A new water supply will be provided to supply the new building.

A new storm sewer will service the new building. All surface water generated from the site will discharge to ground via a stone soakaway.

A new foul connection will be provided for the site to the Uisce Eireann network.

1.2 ENGINEERING INFORMATION

As part of the Planning Application submission for the above development, TOBIN have prepared this Engineering Design Report to address the following design aspects of the proposed development

- Storm Water Drainage
- Wastewater Drainage
- Water Supply

The following drawings are included outlining the design proposals and a Drawing Register is included in **Appendix A**:

- 12084-2000 – Proposed Foul Drainage Layout
- 12084-2001 – Proposed Watermain Layout
- 12084-2002 – Proposed Storm Drainage Layout
- 12084-2003 – Proposed Roads
- 12084-2004 – Standard Watermain Details
- 12084-2005 – Standard Manhole Details Sheet 1
- 12084-2006 – Standard Manhole Details Sheet 2
- 12084-2007 – Standard Pipe Bedding Details
- 12084-2008 – Site Development Details

2. FOUL DRAINAGE

2.1 INTRODUCTION

The Fire Station is serviced by an existing connection to the UE network, it is proposed to tie into the existing foul network serving the Fire Station to service the development.

2.2 WASTEWATER DESIGN

The foul sewer drainage services have been designed in accordance with the requirements of the Civil Engineering Specification for the Water Industry (CESWI), subject to the requirements applied to it by Irish Water, as outlined in the Uisce Eireann Code of Practice for Wastewater Infrastructure.

The pipework for the drainage system has been designed in accordance with the Uisce Eireann Code of Practice for Wastewater Infrastructure and Standard Details.

3. SURFACE WATER DRAINAGE

3.1 INTRODUCTION

The stormwater drainage design has been undertaken using Causeway Flow Drainage Design modelling software. The analysis considered the 30-year and 100-year return period plus an additional 10% and 20% respectively to account for the effects of climate change. The design inputs, results and outputs from the Causeway Flow analysis are shown in **Appendix B** of this report.

The existing site consists of the fire station and surrounding hardstanding. The existing vehicular access to the fire station and adjoining car park currently consists of asphalt surfacing. The existing impermeable areas are currently drained by a series of gullies and drainage channels. The existing drainage network discharges to ground via a soakaway located to the south east of the site.

Surface water from all hard surfaces in the proposed mechanical workshop including pedestrian areas and roofs, will flow by gravity to a new stone soakaway.

All flow velocities within the network fall within the limits set out in "Recommendations for Site Development Works" as published by the Department of Environment.

3.2 SUSTAINABLE URBAN DRAINAGE SYSTEMS

The surface water drainage for the proposed development will be designed in accordance with the principles of Sustainable Urban Drainage Systems (SuDS) as embodied in the recommendations of the Greater Dublin Strategic Drainage Study (GDSDS). The GDSDS addresses the issue of sustainability by requiring designs to comply with a set of drainage criteria which aim to minimise the impact of urbanisation by replicating the runoff characteristics of the greenfield site.

The requirements of SuDS are typically addressed by provision of the following:

- ✓ Interception storage
- ✓ Treatment storage (not required if interception storage is provided)
- ✓ Attenuation storage
- ✓ Long term storage (if this is not required growth rates should not be applied to Q_{bar})

In the case of the subject site, interception and attenuation storage has been proposed by implementing a soakaway within the site. Growth factors will not be applied to the allowable discharge for the 100-year event. This means that both treatment storage and long-term storage (neither of which would be practical on this site) are not required. All SuDS measures will be designed with due reference to the recommendations set out in the EPA's document entitled 'Guidance on Authorisation of Discharges to Groundwater 2011'.

Storage capacity has been calculated and provided in discharge soakaways as though no interception storage were provided. Thereby is mitigated any seasonal performance of interception storage measures.

3.3 SOAKAWAYS(BRE365)

Stormwater from roof run-off and impermeable areas will discharge to a soakaways on the site. Run-off will discharge to ground via a stone soakaway achieving a 35% voids ratio. The

soakaways are designed to hold water for the largest storage required over a 48-hour storm period with rainfall depths taken for the 100-year return period + 20% for climate change for sliding durations obtained from Met Eireann. The soakaway locations are shown graphically on Drawing No. 12084-2002.

Adopted Infiltration rate, f = 0.015 m/hr

The location of the soakaway is shown on Drawing No. 12084-2002

Soakaway Storage Capacity – 24m^3

For further details of the infiltration rates refer to **Appendix D**.

3.4 PETROL INTERCEPTOR

Despite the lack of vehicular traffic on the proposed drainage catchment it is proposed to install a Bypass Petrol Interceptor upstream of the discharge to the soakaway. The location of the interceptor can be seen graphically on drawing No. 12084-2002.

4. WATER SUPPLY

4.1 PROPOSED WATER SUPPLY

The watermain layout is presented in drawings no. 12084-2001. The watermain layout has been designed in accordance with Uisce Eireann Code of Practice for Watermain Infrastructure IW-CDS-5020-03.

The water supply required for the proposed development shall be via a ø 25mm watermain as per Uisce Eireann requirements. It is proposed to connect to the existing 80mm diameter PE100 watermain located to the south of the proposed workshop.

In accordance with Local Authority standards, a Bulk meter, and Logging Device (Larson Type) are already present within the site that will take into account the proposed Building.

Hydrants will be positioned within the site as shown in the Drawing No. 12084-2001. All watermains are to be commissioned and pressure tested.

5. ROADS INFRASTRUCTURE

The proposed development will be accessed using the existing Fire Station Access with the yard area extended to provided access to the workshop bays.

The existing staff parking shall be adequate to cater for the proposed development however an additional accessible parking bay shall be provided directly outside the Mechanics Workshop

Road levels for the site have been derived taking cognisance of the existing topography and ground conditions. All roads will transition between a 1:40 camber and crossfall and longitudinal gradients of road sections lie between 1:21 and 1:200 to ensure adequate surface water drainage is achieved. Gradients within the car park area will not exceed 1:21 to ensure compliance with Technical Guidance Document Part M.

All internal roads will be designed in accordance with the requirements of DMURS and the Recommendations for Site Development Works for Housing Areas.

Appendix A DRAWING REGISTER

TOBIN

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Document and Drawing Issue Register

Project

12084 - VHA - (GCC) Provision of Architect Led Design Team Consultancy Services For Construction of a New Brigade Mechanics Workshop at Athenry Fire Station at Ballgarraun South, Athenry, Co Galway

PLEASE ACKNOWLEDGE RECEIPT OF DRAWINGS

Reasons: AB - As Built, C - For Construction, CM - For Comment,

I - For Information, P - Preliminary, P1 - Information,

P10 - Handover, P2 - Coordination, P3 - Statutory Submission - Planning Permission,

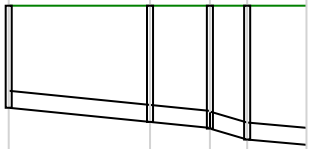
P4 - Statutory Submission - Fire Certificate, P5 - Statutory

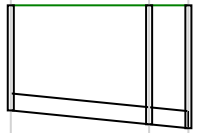
ISSUE NO.	1	2
ISSUED BY	SB	SB
DAY	17	22
MONTH	4	4
YEAR	25	25
ISSUE REASON	I	I

DRG NO.	DRAWING/DOCUMENT TITLE	SIZE	SCALE		
12084-2000	Proposed Foul Drainage Layout	A1	As Drawing	D0	
12084-2001	Proposed Watermain Layout	A1	As Drawing	D0	
12084-2002	Proposed Storm Drainage Layout	A1	As Drawing	D0	D1
12084-2003	Proposed Road Layout	A1	As Drawing	D0	
12084-2004	Standard Watermain Details	A1	As Drawing	D0	
12084-2005	Standard Manhole Details Sheet 1 of 2	A1	As Drawing	D0	
12084-2006	Standard Manhole Details Sheet 2 of 2	A1	As Drawing	D0	
12084-2007	Standard Pipe Bedding Details	A1	As Drawing	D0	
12084-2008	Site Development Details	A1	As Drawing	D0	
DISTRIBUTION				+d - Download and Hardcopy, +h - Email and Hardcopy, cd - CD, d - By Download, e - Email, h - Hardcopy, m - Multiple	
Vincent Hannon Architects					
	Brian Fahy			e	e
ELECTRONIC FORMATS					
	pdf			x	x

DOCUMENT AND DRAWING ISSUE REGISTER

Appendix B CAUSEWAY FLOW MODEL, LONGSECTIONS & RESULTS

Node Name		Pr S01	Pr S02	Pr S03	Pr S04	Pr S05	Infiltration Tank
A4 drawing Hor Scale 1500 Ver Scale 100 Datum (m) 31.000							
Link Name		1.000	1.001	1.002	1.003		
Section Type		225mm	225mm	225mm	225mm		
Slope (1:X)		150.0	150.0	51.1	168.1		
Cover Level (m)		38.100	38.100	38.100	38.100	38.100	
Invert Level (m)		36.750	36.563	36.563	36.484	36.330	36.260
Length (m)		28.032	11.877	7.311	11.760		

Node Name		Pr S05	Pr S04	S03
A4 drawing Hor Scale 1500 Ver Scale 100 Datum (m) 32.000				
Link Name		2.000	2.0(	
Section Type		225mm	225	
Slope (1:X)		150.0	150	
Cover Level (m)		38.100	38.100	38.100
Invert Level (m)		36.710	36.527	36.477
Length (m)		27.439	7.7(	

Design Settings

Rainfall Methodology	FSR	Maximum Time of Concentration (mins)	30.00
Return Period (years)	1	Maximum Rainfall (mm/hr)	55.0
Additional Flow (%)	0	Minimum Velocity (m/s)	1.00
FSR Region	Scotland and Ireland	Connection Type	Level Soffits
M5-60 (mm)	15.900	Minimum Backdrop Height (m)	0.200
Ratio-R	0.270	Preferred Cover Depth (m)	1.200
CV	0.750	Include Intermediate Ground	✓
Time of Entry (mins)	5.00	Enforce best practice design rules	✓

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
Pr S01	0.017	5.00	38.100	1200	-2.149	78.460	1.350
Pr S05	0.021	5.00	38.100	1200	-2.001	47.980	1.390
Pr S04	0.013	5.00	38.100	1200	52.715	49.111	1.573
Pr S02	0.012	5.00	38.100	1200	51.983	79.498	1.537
Pr S03	0.000	5.00	38.100	1200	52.674	64.586	1.625
Pr S06	0.000		38.100	1200	70.536	64.828	1.770
Infiltration Tank			38.100		71.315	53.090	1.840

Links

Name	US Node	DS Node	Length (m)	ks (mm) / n	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	T of C (mins)	Rain (mm/hr)
1.000	Pr S01	Pr S02	28.032	0.600	36.750	36.563	0.187	150.0	225	5.44	37.5
2.000	Pr S05	Pr S04	27.439	0.600	36.710	36.527	0.183	150.0	225	5.43	37.5
1.001	Pr S02	Pr S03	11.876	0.600	36.563	36.484	0.079	150.0	225	5.62	37.0
2.001	Pr S04	Pr S03	7.790	0.600	36.527	36.475	0.052	150.0	225	5.55	37.2
1.002	Pr S03	Pr S06	7.390	0.600	36.475	36.330	0.145	51.0	225	5.69	36.9
1.003	Pr S06	Infiltration Tank	11.764	0.600	36.330	36.260	0.070	168.1	225	5.89	36.4

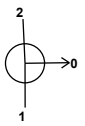
Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	1.065	42.3	1.7	1.125	1.312	0.017	0.0	31	0.528
2.000	1.065	42.3	2.1	1.165	1.348	0.021	0.0	34	0.555
1.001	1.065	42.3	2.9	1.312	1.391	0.029	0.0	40	0.615
2.001	1.065	42.3	3.4	1.348	1.400	0.034	0.0	44	0.647
1.002	1.836	73.0	6.3	1.400	1.545	0.063	0.0	44	1.133
1.003	1.005	40.0	6.2	1.545	1.615	0.063	0.0	60	0.737

Pipeline Schedule

Link	Length (m)	Slope (1:X)	Dia (mm)	Link Type	US CL (m)	US IL (m)	US Depth (m)	DS CL (m)	DS IL (m)	DS Depth (m)
1.000	28.032	150.0	225	Circular	38.100	36.750	1.125	38.100	36.563	1.312
2.000	27.439	150.0	225	Circular	38.100	36.710	1.165	38.100	36.527	1.348
1.001	11.876	150.0	225	Circular	38.100	36.563	1.312	38.100	36.484	1.391
2.001	7.790	150.0	225	Circular	38.100	36.527	1.348	38.100	36.475	1.400
1.002	7.390	51.0	225	Circular	38.100	36.475	1.400	38.100	36.330	1.545
1.003	11.764	168.1	225	Circular	38.100	36.330	1.545	38.100	36.260	1.615

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	Pr S01	1200	Manhole	Adoptable	Pr S02	1200	Manhole	Adoptable
2.000	Pr S05	1200	Manhole	Adoptable	Pr S04	1200	Manhole	Adoptable
1.001	Pr S02	1200	Manhole	Adoptable	Pr S03	1200	Manhole	Adoptable
2.001	Pr S04	1200	Manhole	Adoptable	Pr S03	1200	Manhole	Adoptable
1.002	Pr S03	1200	Manhole	Adoptable	Pr S06	1200	Manhole	Adoptable
1.003	Pr S06	1200	Manhole	Adoptable	Infiltration Tank		Junction	

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
Pr S01	-2.149	78.460	38.100	1.350	1200				
						0	1.000	36.750	225
Pr S05	-2.001	47.980	38.100	1.390	1200				
						0	2.000	36.710	225
Pr S04	52.715	49.111	38.100	1.573	1200		1	2.000	36.527	225
							0	2.001	36.527	225
Pr S02	51.983	79.498	38.100	1.537	1200		1	1.000	36.563	225
							0	1.001	36.563	225
Pr S03	52.674	64.586	38.100	1.625	1200		1	2.001	36.475	225
							2	1.001	36.484	225
							0	1.002	36.475	225
Pr S06	70.536	64.828	38.100	1.770	1200		1	1.002	36.330	225
							0	1.003	36.330	225
Infiltration Tank	71.315	53.090	38.100	1.840			1	1.003	36.260	225

Simulation Settings

Rainfall Methodology	FSR	Analysis Speed	Normal
FSR Region	Scotland and Ireland	Skip Steady State	x
M5-60 (mm)	15.900	Drain Down Time (mins)	240
Ratio-R	0.270	Additional Storage (m³/ha)	20.0
Summer CV	0.750	Check Discharge Rate(s)	x
Winter CV	0.840	Check Discharge Volume	x

Storm Durations

15	30	60	120	180	240	360	480	600	720	960	1440

Return Period (years)	Climate Change (CC %)	Additional Area (A %)	Additional Flow (Q %)
1	0	0	0
30	10	0	0
100	20	0	0

Node Infiltration Tank Soakaway Storage Structure

Base Inf Coefficient (m/hr)	0.01530	Invert Level (m)	36.260	Depth (m)	1.000
Side Inf Coefficient (m/hr)	0.01530	Time to half empty (mins)	1238	Inf Depth (m)	
Safety Factor	2.0	Pit Width (m)	6.000	Number Required	1
Porosity	0.40	Pit Length (m)	10.000		

Node Pr S02 Link Surround Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Link	1.000
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	36.563	Surround Shape	(Trench)
Safety Factor	2.0	Time to half empty (mins)		Diameter (mm)	150

Node Pr S04 Link Surround Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Link	2.000
Side Inf Coefficient (m/hr)	0.00000	Invert Level (m)	36.527	Surround Shape	(Trench)
Safety Factor	2.0	Time to half empty (mins)		Diameter (mm)	150

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
1 year 15 minute summer	84.613	23.942	1 year 480 minute winter	7.668	3.050
1 year 15 minute winter	59.377	23.942	1 year 600 minute summer	9.694	2.652
1 year 30 minute summer	58.262	16.486	1 year 600 minute winter	6.624	2.652
1 year 30 minute winter	40.886	16.486	1 year 720 minute summer	8.825	2.365
1 year 60 minute summer	41.623	11.000	1 year 720 minute winter	5.931	2.365
1 year 60 minute winter	27.653	11.000	1 year 960 minute summer	7.540	1.985
1 year 120 minute summer	27.310	7.217	1 year 960 minute winter	4.994	1.985
1 year 120 minute winter	18.144	7.217	1 year 1440 minute summer	5.729	1.535
1 year 180 minute summer	21.837	5.619	1 year 1440 minute winter	3.850	1.535
1 year 180 minute winter	14.194	5.619	30 year +10% CC 15 minute summer	206.541	58.444
1 year 240 minute summer	17.790	4.701	30 year +10% CC 15 minute winter	144.941	58.444
1 year 240 minute winter	11.819	4.701	30 year +10% CC 30 minute summer	142.586	40.347
1 year 360 minute summer	14.200	3.654	30 year +10% CC 30 minute winter	100.061	40.347
1 year 360 minute winter	9.230	3.654	30 year +10% CC 60 minute summer	100.224	26.486
1 year 480 minute summer	11.542	3.050	30 year +10% CC 60 minute winter	66.586	26.486

Rainfall

Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)	Event	Peak Intensity (mm/hr)	Average Intensity (mm/hr)
30 year +10% CC 120 minute summer	64.077	16.934	100 year +20% CC 30 minute winter	142.421	57.428
30 year +10% CC 120 minute winter	42.572	16.934	100 year +20% CC 60 minute summer	142.198	37.579
30 year +10% CC 180 minute summer	50.288	12.941	100 year +20% CC 60 minute winter	94.473	37.579
30 year +10% CC 180 minute winter	32.689	12.941	100 year +20% CC 120 minute summer	90.198	23.837
30 year +10% CC 240 minute summer	40.387	10.673	100 year +20% CC 120 minute winter	59.925	23.837
30 year +10% CC 240 minute winter	26.832	10.673	100 year +20% CC 180 minute summer	70.365	18.107
30 year +10% CC 360 minute summer	31.539	8.116	100 year +20% CC 180 minute winter	45.739	18.107
30 year +10% CC 360 minute winter	20.501	8.116	100 year +20% CC 240 minute summer	56.256	14.867
30 year +10% CC 480 minute summer	25.258	6.675	100 year +20% CC 240 minute winter	37.375	14.867
30 year +10% CC 480 minute winter	16.781	6.675	100 year +20% CC 360 minute summer	43.629	11.227
30 year +10% CC 600 minute summer	20.960	5.733	100 year +20% CC 360 minute winter	28.360	11.227
30 year +10% CC 600 minute winter	14.321	5.733	100 year +20% CC 480 minute summer	34.762	9.187
30 year +10% CC 720 minute summer	18.887	5.062	100 year +20% CC 480 minute winter	23.095	9.187
30 year +10% CC 720 minute winter	12.693	5.062	100 year +20% CC 600 minute summer	28.728	7.858
30 year +10% CC 960 minute summer	15.788	4.157	100 year +20% CC 600 minute winter	19.629	7.858
30 year +10% CC 960 minute winter	10.458	4.157	100 year +20% CC 720 minute summer	25.798	6.914
30 year +10% CC 1440 minute summer	11.750	3.149	100 year +20% CC 720 minute winter	17.338	6.914
30 year +10% CC 1440 minute winter	7.896	3.149	100 year +20% CC 960 minute summer	21.447	5.648
100 year +20% CC 15 minute summer	291.748	82.555	100 year +20% CC 960 minute winter	14.207	5.648
100 year +20% CC 15 minute winter	204.735	82.555	100 year +20% CC 1440 minute summer	15.839	4.245
100 year +20% CC 30 minute summer	202.949	57.428	100 year +20% CC 1440 minute winter	10.645	4.245

Results for 1 year Critical Storm Duration. Lowest mass balance: 98.48%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	Pr S01	10	36.781	0.031	1.9	0.0435	0.0000	OK
15 minute winter	Pr S05	10	36.745	0.035	2.3	0.0501	0.0000	OK
1440 minute winter	Pr S04	1050	36.616	0.089	0.3	0.1164	0.0000	OK
1440 minute winter	Pr S02	1050	36.616	0.053	0.3	0.0692	0.0000	OK
1440 minute winter	Pr S03	1050	36.616	0.141	0.6	0.1594	0.0000	OK
1440 minute winter	Pr S06	1050	36.616	0.286	0.6	0.3234	0.0000	SURCHARGED
1440 minute winter	Infiltration Tank	1050	36.616	0.356	0.5	8.5416	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	Pr S01	1.000	Pr S02	1.8	0.439	0.042	0.1174
15 minute winter	Pr S05	2.000	Pr S04	2.2	0.466	0.053	0.1338
1440 minute winter	Pr S04	2.001	Pr S03	0.3	0.310	0.007	0.1586
1440 minute winter	Pr S02	1.001	Pr S03	0.3	0.314	0.007	0.1857
1440 minute winter	Pr S03	1.002	Pr S06	0.6	0.396	0.008	0.2436
1440 minute winter	Pr S06	1.003	Infiltration Tank	0.5	0.368	0.014	0.4679
1440 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC Critical Storm Duration. Lowest mass balance: 98.48%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	Pr S01	915	37.102	0.352	0.4	0.4866	0.0000	SURCHARGED
960 minute winter	Pr S05	915	37.102	0.392	0.5	0.5615	0.0000	SURCHARGED
960 minute winter	Pr S04	915	37.102	0.575	0.8	1.0151	0.0000	SURCHARGED
960 minute winter	Pr S02	915	37.102	0.539	0.7	0.9207	0.0000	SURCHARGED
960 minute winter	Pr S03	915	37.102	0.627	1.2	0.7090	0.0000	SURCHARGED
960 minute winter	Pr S06	915	37.102	0.772	1.1	0.8729	0.0000	SURCHARGED
960 minute winter	Infiltration Tank	915	37.102	0.842	1.1	20.2041	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
960 minute winter	Pr S01	1.000	Pr S02	0.4	0.258	0.009	1.1149
960 minute winter	Pr S05	2.000	Pr S04	0.5	0.291	0.012	1.0913
960 minute winter	Pr S04	2.001	Pr S03	0.7	0.350	0.016	0.3098
960 minute winter	Pr S02	1.001	Pr S03	0.5	0.340	0.013	0.4723
960 minute winter	Pr S03	1.002	Pr S06	1.1	0.396	0.015	0.2939
960 minute winter	Pr S06	1.003	Infiltration Tank	1.1	0.390	0.027	0.4679
960 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC Critical Storm Duration. Lowest mass balance: 98.48%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	Pr S01	1380	38.070	1.320	0.4	1.8255	0.0000	FLOOD RISK
1440 minute winter	Pr S05	1380	38.070	1.360	0.5	1.9488	0.0000	FLOOD RISK
1440 minute winter	Pr S04	1380	38.070	1.543	0.7	3.4645	0.0000	FLOOD RISK
1440 minute winter	Pr S02	1380	38.070	1.507	0.6	3.3885	0.0000	FLOOD RISK
1440 minute winter	Pr S03	1380	38.070	1.595	1.2	1.8039	0.0000	FLOOD RISK
1440 minute winter	Pr S06	1380	38.070	1.740	1.2	1.9679	0.0000	FLOOD RISK
1440 minute winter	Infiltration Tank	1380	38.070	1.810	1.1	24.0120	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute winter	Pr S01	1.000	Pr S02	0.4	0.235	0.009	1.1149
1440 minute winter	Pr S05	2.000	Pr S04	0.4	0.236	0.011	1.0913
1440 minute winter	Pr S04	2.001	Pr S03	0.6	0.306	0.015	0.3098
1440 minute winter	Pr S02	1.001	Pr S03	0.6	0.311	0.013	0.4723
1440 minute winter	Pr S03	1.002	Pr S06	1.2	0.396	0.016	0.2939
1440 minute winter	Pr S06	1.003	Infiltration Tank	1.1	0.368	0.028	0.4679
1440 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 1 year 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	Pr S01	10	36.781	0.031	1.8	0.0428	0.0000	OK
15 minute summer	Pr S05	10	36.744	0.034	2.2	0.0490	0.0000	OK
15 minute summer	Pr S04	11	36.572	0.045	3.4	0.0598	0.0000	OK
15 minute summer	Pr S02	11	36.604	0.041	2.9	0.0539	0.0000	OK
15 minute summer	Pr S03	11	36.521	0.046	6.4	0.0519	0.0000	OK
15 minute summer	Pr S06	11	36.391	0.061	6.3	0.0693	0.0000	OK
15 minute summer	Infiltration Tank	25	36.364	0.104	6.3	2.5041	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute summer	Pr S01	1.000	Pr S02	1.7	0.435	0.041	0.1150
15 minute summer	Pr S05	2.000	Pr S04	2.1	0.460	0.050	0.1298
15 minute summer	Pr S04	2.001	Pr S03	3.4	0.600	0.081	0.0447
15 minute summer	Pr S02	1.001	Pr S03	2.9	0.604	0.069	0.0573
15 minute summer	Pr S03	1.002	Pr S06	6.3	0.877	0.087	0.0537
15 minute summer	Pr S06	1.003	Infiltration Tank	6.3	1.133	0.158	0.1291
15 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 1 year 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	Pr S01	10	36.781	0.031	1.9	0.0435	0.0000	OK
15 minute winter	Pr S05	10	36.745	0.035	2.3	0.0501	0.0000	OK
15 minute winter	Pr S04	11	36.573	0.046	3.6	0.0610	0.0000	OK
15 minute winter	Pr S02	11	36.605	0.042	3.1	0.0548	0.0000	OK
15 minute winter	Pr S03	11	36.522	0.047	6.6	0.0531	0.0000	OK
15 minute winter	Pr S06	11	36.393	0.063	6.6	0.0707	0.0000	OK
15 minute winter	Infiltration Tank	24	36.375	0.115	6.6	2.7590	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	Pr S01	1.000	Pr S02	1.8	0.439	0.042	0.1174
15 minute winter	Pr S05	2.000	Pr S04	2.2	0.466	0.053	0.1338
15 minute winter	Pr S04	2.001	Pr S03	3.6	0.607	0.085	0.0461
15 minute winter	Pr S02	1.001	Pr S03	3.0	0.610	0.071	0.0587
15 minute winter	Pr S03	1.002	Pr S06	6.6	0.888	0.091	0.0553
15 minute winter	Pr S06	1.003	Infiltration Tank	6.6	1.092	0.165	0.1541
15 minute winter	Infiltration Tank	Infiltration		0.1			

Results for 1 year 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	Pr S01	18	36.781	0.031	1.7	0.0422	0.0000	OK
30 minute summer	Pr S05	18	36.744	0.034	2.1	0.0484	0.0000	OK
30 minute summer	Pr S04	18	36.572	0.045	3.4	0.0589	0.0000	OK
30 minute summer	Pr S02	18	36.603	0.040	2.9	0.0529	0.0000	OK
30 minute summer	Pr S03	19	36.520	0.045	6.1	0.0508	0.0000	OK
30 minute summer	Pr S06	39	36.401	0.071	6.1	0.0806	0.0000	OK
30 minute summer	Infiltration Tank	37	36.400	0.140	6.2	3.3652	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute summer	Pr S01	1.000	Pr S02	1.7	0.424	0.040	0.1122
30 minute summer	Pr S05	2.000	Pr S04	2.1	0.452	0.049	0.1274
30 minute summer	Pr S04	2.001	Pr S03	3.3	0.597	0.079	0.0435
30 minute summer	Pr S02	1.001	Pr S03	2.8	0.598	0.066	0.0556
30 minute summer	Pr S03	1.002	Pr S06	6.1	0.869	0.084	0.0529
30 minute summer	Pr S06	1.003	Infiltration Tank	6.2	0.812	0.154	0.2160
30 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 1 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	Pr S01	18	36.779	0.029	1.5	0.0398	0.0000	OK
30 minute winter	Pr S05	18	36.742	0.032	1.9	0.0462	0.0000	OK
30 minute winter	Pr S04	18	36.570	0.043	3.1	0.0564	0.0000	OK
30 minute winter	Pr S02	18	36.601	0.038	2.6	0.0504	0.0000	OK
30 minute winter	Pr S03	18	36.518	0.043	5.6	0.0484	0.0000	OK
30 minute winter	Pr S06	39	36.416	0.086	5.6	0.0969	0.0000	OK
30 minute winter	Infiltration Tank	37	36.415	0.155	5.7	3.7151	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute winter	Pr S01	1.000	Pr S02	1.5	0.405	0.035	0.1040
30 minute winter	Pr S05	2.000	Pr S04	1.9	0.438	0.045	0.1193
30 minute winter	Pr S04	2.001	Pr S03	3.1	0.586	0.072	0.0408
30 minute winter	Pr S02	1.001	Pr S03	2.5	0.581	0.060	0.0520
30 minute winter	Pr S03	1.002	Pr S06	5.6	0.856	0.076	0.0535
30 minute winter	Pr S06	1.003	Infiltration Tank	5.7	0.802	0.143	0.2525
30 minute winter	Infiltration Tank	Infiltration		0.1			

Results for 1 year 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	Pr S01	34	36.777	0.027	1.3	0.0373	0.0000	OK
60 minute summer	Pr S05	34	36.740	0.030	1.6	0.0426	0.0000	OK
60 minute summer	Pr S04	34	36.566	0.039	2.6	0.0519	0.0000	OK
60 minute summer	Pr S02	34	36.599	0.036	2.2	0.0469	0.0000	OK
60 minute summer	Pr S03	34	36.515	0.040	4.8	0.0447	0.0000	OK
60 minute summer	Pr S06	67	36.439	0.109	4.8	0.1233	0.0000	OK
60 minute summer	Infiltration Tank	68	36.439	0.179	4.8	4.2844	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
60 minute summer	Pr S01	1.000	Pr S02	1.3	0.394	0.031	0.0938
60 minute summer	Pr S05	2.000	Pr S04	1.6	0.419	0.038	0.1057
60 minute summer	Pr S04	2.001	Pr S03	2.6	0.560	0.061	0.0362
60 minute summer	Pr S02	1.001	Pr S03	2.2	0.557	0.052	0.0467
60 minute summer	Pr S03	1.002	Pr S06	4.8	0.827	0.066	0.0721
60 minute summer	Pr S06	1.003	Infiltration Tank	4.8	0.642	0.120	0.3108
60 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 1 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	Pr S01	33	36.775	0.025	1.1	0.0344	0.0000	OK
60 minute winter	Pr S05	34	36.737	0.027	1.3	0.0386	0.0000	OK
60 minute winter	Pr S04	34	36.562	0.035	2.1	0.0466	0.0000	OK
60 minute winter	Pr S02	33	36.596	0.033	1.9	0.0431	0.0000	OK
60 minute winter	Pr S03	34	36.511	0.036	3.9	0.0403	0.0000	OK
60 minute winter	Pr S06	67	36.458	0.128	3.9	0.1443	0.0000	OK
60 minute winter	Infiltration Tank	66	36.457	0.197	4.0	4.7382	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
60 minute winter	Pr S01	1.000	Pr S02	1.1	0.370	0.026	0.0830
60 minute winter	Pr S05	2.000	Pr S04	1.3	0.395	0.031	0.0908
60 minute winter	Pr S04	2.001	Pr S03	2.1	0.530	0.050	0.0310
60 minute winter	Pr S02	1.001	Pr S03	1.8	0.530	0.044	0.0414
60 minute winter	Pr S03	1.002	Pr S06	3.9	0.786	0.054	0.0878
60 minute winter	Pr S06	1.003	Infiltration Tank	4.0	0.670	0.099	0.3538
60 minute winter	Infiltration Tank	Infiltration		0.1			

Results for 1 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	Pr S01	64	36.773	0.023	0.9	0.0313	0.0000	OK
120 minute summer	Pr S05	64	36.735	0.025	1.1	0.0357	0.0000	OK
120 minute summer	Pr S04	64	36.559	0.032	1.8	0.0431	0.0000	OK
120 minute summer	Pr S02	64	36.593	0.030	1.6	0.0400	0.0000	OK
120 minute summer	Pr S03	64	36.508	0.033	3.4	0.0372	0.0000	OK
120 minute summer	Pr S06	126	36.483	0.153	3.4	0.1727	0.0000	OK
120 minute summer	Infiltration Tank	126	36.483	0.223	3.3	5.3435	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute summer	Pr S01	1.000	Pr S02	0.9	0.345	0.021	0.0736
120 minute summer	Pr S05	2.000	Pr S04	1.1	0.375	0.026	0.0809
120 minute summer	Pr S04	2.001	Pr S03	1.8	0.506	0.042	0.0277
120 minute summer	Pr S02	1.001	Pr S03	1.6	0.507	0.037	0.0372
120 minute summer	Pr S03	1.002	Pr S06	3.4	0.754	0.046	0.1080
120 minute summer	Pr S06	1.003	Infiltration Tank	3.3	0.611	0.083	0.4021
120 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 1 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	Pr S01	66	36.770	0.020	0.7	0.0278	0.0000	OK
120 minute winter	Pr S05	66	36.733	0.023	0.9	0.0325	0.0000	OK
120 minute winter	Pr S04	66	36.556	0.029	1.4	0.0381	0.0000	OK
120 minute winter	Pr S02	66	36.589	0.026	1.2	0.0349	0.0000	OK
120 minute winter	Pr S03	122	36.509	0.034	2.6	0.0384	0.0000	OK
120 minute winter	Pr S06	124	36.509	0.179	2.6	0.2024	0.0000	OK
120 minute winter	Infiltration Tank	124	36.509	0.249	2.5	5.9747	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute winter	Pr S01	1.000	Pr S02	0.7	0.325	0.017	0.0608
120 minute winter	Pr S05	2.000	Pr S04	0.9	0.362	0.021	0.0687
120 minute winter	Pr S04	2.001	Pr S03	1.4	0.474	0.033	0.0230
120 minute winter	Pr S02	1.001	Pr S03	1.2	0.467	0.028	0.0305
120 minute winter	Pr S03	1.002	Pr S06	2.6	0.692	0.036	0.1390
120 minute winter	Pr S06	1.003	Infiltration Tank	2.5	0.612	0.062	0.4332
120 minute winter	Infiltration Tank	Infiltration		0.1			

Results for 1 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	Pr S01	96	36.770	0.020	0.7	0.0278	0.0000	OK
180 minute summer	Pr S05	96	36.733	0.023	0.9	0.0325	0.0000	OK
180 minute summer	Pr S04	96	36.557	0.030	1.5	0.0394	0.0000	OK
180 minute summer	Pr S02	96	36.589	0.026	1.2	0.0349	0.0000	OK
180 minute summer	Pr S03	184	36.517	0.042	2.7	0.0477	0.0000	OK
180 minute summer	Pr S06	184	36.517	0.187	2.7	0.2117	0.0000	OK
180 minute summer	Infiltration Tank	184	36.517	0.257	2.5	6.1721	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
180 minute summer	Pr S01	1.000	Pr S02	0.7	0.324	0.017	0.0608
180 minute summer	Pr S05	2.000	Pr S04	0.9	0.351	0.021	0.0707
180 minute summer	Pr S04	2.001	Pr S03	1.5	0.489	0.035	0.0239
180 minute summer	Pr S02	1.001	Pr S03	1.2	0.467	0.028	0.0305
180 minute summer	Pr S03	1.002	Pr S06	2.7	0.662	0.037	0.1494
180 minute summer	Pr S06	1.003	Infiltration Tank	2.5	0.545	0.063	0.4416
180 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 1 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	Pr S01	96	36.769	0.019	0.6	0.0259	0.0000	OK
180 minute winter	Pr S05	96	36.730	0.020	0.7	0.0289	0.0000	OK
180 minute winter	Pr S04	92	36.553	0.026	1.1	0.0338	0.0000	OK
180 minute winter	Pr S02	96	36.587	0.024	1.0	0.0319	0.0000	OK
180 minute winter	Pr S03	180	36.542	0.067	2.1	0.0755	0.0000	OK
180 minute winter	Pr S06	180	36.542	0.212	2.1	0.2394	0.0000	OK
180 minute winter	Infiltration Tank	180	36.542	0.282	1.9	6.7561	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
180 minute winter	Pr S01	1.000	Pr S02	0.6	0.313	0.014	0.0539
180 minute winter	Pr S05	2.000	Pr S04	0.7	0.334	0.017	0.0576
180 minute winter	Pr S04	2.001	Pr S03	1.1	0.441	0.026	0.0424
180 minute winter	Pr S02	1.001	Pr S03	1.0	0.442	0.024	0.0502
180 minute winter	Pr S03	1.002	Pr S06	2.1	0.608	0.029	0.1797
180 minute winter	Pr S06	1.003	Infiltration Tank	1.9	0.587	0.048	0.4620
180 minute winter	Infiltration Tank	Infiltration		0.1			

Results for 1 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	Pr S01	128	36.769	0.019	0.6	0.0259	0.0000	OK
240 minute summer	Pr S05	124	36.731	0.021	0.8	0.0304	0.0000	OK
240 minute summer	Pr S04	124	36.554	0.027	1.3	0.0360	0.0000	OK
240 minute summer	Pr S02	128	36.587	0.024	1.0	0.0319	0.0000	OK
240 minute summer	Pr S03	244	36.527	0.052	2.2	0.0592	0.0000	OK
240 minute summer	Pr S06	244	36.527	0.197	2.2	0.2233	0.0000	OK
240 minute summer	Infiltration Tank	244	36.527	0.267	2.1	6.4179	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
240 minute summer	Pr S01	1.000	Pr S02	0.6	0.313	0.014	0.0539
240 minute summer	Pr S05	2.000	Pr S04	0.8	0.343	0.018	0.0630
240 minute summer	Pr S04	2.001	Pr S03	1.2	0.463	0.029	0.0287
240 minute summer	Pr S02	1.001	Pr S03	1.0	0.443	0.024	0.0340
240 minute summer	Pr S03	1.002	Pr S06	2.2	0.591	0.031	0.1623
240 minute summer	Pr S06	1.003	Infiltration Tank	2.1	0.482	0.051	0.4512
240 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 1 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	Pr S01	128	36.767	0.017	0.5	0.0238	0.0000	OK
240 minute winter	Pr S05	128	36.729	0.019	0.6	0.0268	0.0000	OK
240 minute winter	Pr S04	236	36.564	0.037	1.0	0.0493	0.0000	OK
240 minute winter	Pr S02	128	36.585	0.022	0.8	0.0286	0.0000	OK
240 minute winter	Pr S03	240	36.564	0.089	1.8	0.1008	0.0000	OK
240 minute winter	Pr S06	240	36.564	0.234	1.8	0.2648	0.0000	SURCHARGED
240 minute winter	Infiltration Tank	236	36.564	0.304	1.6	7.3008	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
240 minute winter	Pr S01	1.000	Pr S02	0.5	0.303	0.012	0.0467
240 minute winter	Pr S05	2.000	Pr S04	0.6	0.324	0.014	0.0650
240 minute winter	Pr S04	2.001	Pr S03	1.0	0.434	0.024	0.0736
240 minute winter	Pr S02	1.001	Pr S03	0.8	0.414	0.019	0.0782
240 minute winter	Pr S03	1.002	Pr S06	1.8	0.580	0.025	0.2010
240 minute winter	Pr S06	1.003	Infiltration Tank	1.6	0.588	0.041	0.4679
240 minute winter	Infiltration Tank	Infiltration		0.1			

Results for 1 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	Pr S01	184	36.767	0.017	0.5	0.0236	0.0000	OK
360 minute summer	Pr S05	184	36.729	0.019	0.6	0.0266	0.0000	OK
360 minute summer	Pr S04	184	36.551	0.024	1.0	0.0318	0.0000	OK
360 minute summer	Pr S02	184	36.586	0.023	0.9	0.0298	0.0000	OK
360 minute summer	Pr S03	320	36.540	0.065	1.8	0.0732	0.0000	OK
360 minute summer	Pr S06	320	36.540	0.210	1.8	0.2372	0.0000	OK
360 minute summer	Infiltration Tank	320	36.540	0.280	1.6	6.7158	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
360 minute summer	Pr S01	1.000	Pr S02	0.5	0.289	0.012	0.0480
360 minute summer	Pr S05	2.000	Pr S04	0.6	0.312	0.014	0.0521
360 minute summer	Pr S04	2.001	Pr S03	1.0	0.424	0.023	0.0402
360 minute summer	Pr S02	1.001	Pr S03	0.9	0.424	0.020	0.0474
360 minute summer	Pr S03	1.002	Pr S06	1.8	0.530	0.025	0.1773
360 minute summer	Pr S06	1.003	Infiltration Tank	1.6	0.397	0.041	0.4608
360 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 1 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	Pr S01	184	36.766	0.016	0.4	0.0215	0.0000	OK
360 minute winter	Pr S05	184	36.727	0.017	0.5	0.0244	0.0000	OK
360 minute winter	Pr S04	344	36.581	0.054	0.8	0.0713	0.0000	OK
360 minute winter	Pr S02	192	36.583	0.020	0.7	0.0269	0.0000	OK
360 minute winter	Pr S03	344	36.581	0.106	1.5	0.1200	0.0000	OK
360 minute winter	Pr S06	344	36.581	0.251	1.5	0.2840	0.0000	SURCHARGED
360 minute winter	Infiltration Tank	344	36.581	0.321	1.3	7.7061	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
360 minute winter	Pr S01	1.000	Pr S02	0.4	0.272	0.009	0.0414
360 minute winter	Pr S05	2.000	Pr S04	0.5	0.301	0.012	0.1066
360 minute winter	Pr S04	2.001	Pr S03	0.8	0.397	0.018	0.1002
360 minute winter	Pr S02	1.001	Pr S03	0.7	0.399	0.017	0.1061
360 minute winter	Pr S03	1.002	Pr S06	1.5	0.507	0.020	0.2149
360 minute winter	Pr S06	1.003	Infiltration Tank	1.3	0.496	0.033	0.4679
360 minute winter	Infiltration Tank	Infiltration		0.1			

Results for 1 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	Pr S01	248	36.766	0.016	0.4	0.0215	0.0000	OK
480 minute summer	Pr S05	248	36.727	0.017	0.5	0.0247	0.0000	OK
480 minute summer	Pr S04	392	36.552	0.025	0.8	0.0332	0.0000	OK
480 minute summer	Pr S02	248	36.583	0.020	0.7	0.0269	0.0000	OK
480 minute summer	Pr S03	392	36.552	0.077	1.5	0.0872	0.0000	OK
480 minute summer	Pr S06	392	36.552	0.222	1.5	0.2511	0.0000	OK
480 minute summer	Infiltration Tank	392	36.552	0.292	1.4	7.0082	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
480 minute summer	Pr S01	1.000	Pr S02	0.4	0.272	0.009	0.0414
480 minute summer	Pr S05	2.000	Pr S04	0.5	0.302	0.012	0.0458
480 minute summer	Pr S04	2.001	Pr S03	0.8	0.401	0.019	0.0561
480 minute summer	Pr S02	1.001	Pr S03	0.7	0.399	0.017	0.0620
480 minute summer	Pr S03	1.002	Pr S06	1.5	0.519	0.021	0.1909
480 minute summer	Pr S06	1.003	Infiltration Tank	1.4	0.408	0.034	0.4671
480 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 1 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	Pr S01	224	36.764	0.014	0.3	0.0188	0.0000	OK
480 minute winter	Pr S05	240	36.726	0.016	0.4	0.0223	0.0000	OK
480 minute winter	Pr S04	448	36.594	0.067	0.6	0.0882	0.0000	OK
480 minute winter	Pr S02	448	36.594	0.031	0.5	0.0411	0.0000	OK
480 minute winter	Pr S03	448	36.594	0.119	1.1	0.1348	0.0000	OK
480 minute winter	Pr S06	448	36.594	0.264	1.1	0.2988	0.0000	SURCHARGED
480 minute winter	Infiltration Tank	448	36.594	0.334	1.0	8.0201	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
480 minute winter	Pr S01	1.000	Pr S02	0.3	0.270	0.007	0.0522
480 minute winter	Pr S05	2.000	Pr S04	0.4	0.288	0.009	0.1423
480 minute winter	Pr S04	2.001	Pr S03	0.6	0.372	0.014	0.1218
480 minute winter	Pr S02	1.001	Pr S03	0.5	0.359	0.012	0.1343
480 minute winter	Pr S03	1.002	Pr S06	1.1	0.471	0.015	0.2258
480 minute winter	Pr S06	1.003	Infiltration Tank	1.0	0.408	0.025	0.4679
480 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 1 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	Pr S01	300	36.764	0.014	0.3	0.0188	0.0000	OK
600 minute summer	Pr S05	315	36.726	0.016	0.4	0.0223	0.0000	OK
600 minute summer	Pr S04	465	36.554	0.027	0.7	0.0359	0.0000	OK
600 minute summer	Pr S02	315	36.580	0.017	0.5	0.0229	0.0000	OK
600 minute summer	Pr S03	465	36.554	0.079	1.2	0.0896	0.0000	OK
600 minute summer	Pr S06	465	36.554	0.224	1.2	0.2535	0.0000	OK
600 minute summer	Infiltration Tank	465	36.554	0.294	1.1	7.0585	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
600 minute summer	Pr S01	1.000	Pr S02	0.3	0.256	0.007	0.0332
600 minute summer	Pr S05	2.000	Pr S04	0.4	0.270	0.009	0.0431
600 minute summer	Pr S04	2.001	Pr S03	0.7	0.397	0.017	0.0590
600 minute summer	Pr S02	1.001	Pr S03	0.5	0.359	0.012	0.0642
600 minute summer	Pr S03	1.002	Pr S06	1.2	0.504	0.016	0.1928
600 minute summer	Pr S06	1.003	Infiltration Tank	1.1	0.344	0.027	0.4676
600 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 1 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	Pr S01	315	36.764	0.014	0.3	0.0188	0.0000	OK
600 minute winter	Pr S05	270	36.724	0.014	0.3	0.0195	0.0000	OK
600 minute winter	Pr S04	495	36.601	0.074	0.5	0.0972	0.0000	OK
600 minute winter	Pr S02	495	36.601	0.038	0.5	0.0501	0.0000	OK
600 minute winter	Pr S03	495	36.601	0.126	1.0	0.1426	0.0000	OK
600 minute winter	Pr S06	495	36.601	0.271	1.0	0.3066	0.0000	SURCHARGED
600 minute winter	Infiltration Tank	495	36.601	0.341	0.9	8.1872	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
600 minute winter	Pr S01	1.000	Pr S02	0.3	0.256	0.007	0.0678
600 minute winter	Pr S05	2.000	Pr S04	0.3	0.258	0.007	0.1622
600 minute winter	Pr S04	2.001	Pr S03	0.5	0.360	0.012	0.1335
600 minute winter	Pr S02	1.001	Pr S03	0.5	0.359	0.012	0.1502
600 minute winter	Pr S03	1.002	Pr S06	1.0	0.442	0.014	0.2315
600 minute winter	Pr S06	1.003	Infiltration Tank	0.9	0.344	0.023	0.4679
600 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 1 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	Pr S01	360	36.764	0.014	0.3	0.0188	0.0000	OK
720 minute summer	Pr S05	375	36.726	0.016	0.4	0.0223	0.0000	OK
720 minute summer	Pr S04	540	36.557	0.030	0.6	0.0393	0.0000	OK
720 minute summer	Pr S02	375	36.580	0.017	0.5	0.0229	0.0000	OK
720 minute summer	Pr S03	540	36.557	0.082	1.1	0.0922	0.0000	OK
720 minute summer	Pr S06	540	36.557	0.227	1.1	0.2563	0.0000	SURCHARGED
720 minute summer	Infiltration Tank	540	36.557	0.297	1.0	7.1202	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
720 minute summer	Pr S01	1.000	Pr S02	0.3	0.256	0.007	0.0332
720 minute summer	Pr S05	2.000	Pr S04	0.4	0.288	0.009	0.0483
720 minute summer	Pr S04	2.001	Pr S03	0.6	0.372	0.014	0.0625
720 minute summer	Pr S02	1.001	Pr S03	0.5	0.359	0.012	0.0677
720 minute summer	Pr S03	1.002	Pr S06	1.1	0.504	0.015	0.1948
720 minute summer	Pr S06	1.003	Infiltration Tank	1.0	0.344	0.025	0.4678
720 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 1 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	Pr S01	300	36.761	0.011	0.2	0.0156	0.0000	OK
720 minute winter	Pr S05	345	36.724	0.014	0.3	0.0195	0.0000	OK
720 minute winter	Pr S04	570	36.596	0.069	0.5	0.0899	0.0000	OK
720 minute winter	Pr S02	570	36.596	0.033	0.4	0.0429	0.0000	OK
720 minute winter	Pr S03	570	36.596	0.121	0.9	0.1363	0.0000	OK
720 minute winter	Pr S06	570	36.596	0.266	0.9	0.3003	0.0000	SURCHARGED
720 minute winter	Infiltration Tank	570	36.596	0.336	0.8	8.0535	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
720 minute winter	Pr S01	1.000	Pr S02	0.2	0.235	0.005	0.0551
720 minute winter	Pr S05	2.000	Pr S04	0.3	0.258	0.007	0.1462
720 minute winter	Pr S04	2.001	Pr S03	0.5	0.360	0.012	0.1241
720 minute winter	Pr S02	1.001	Pr S03	0.4	0.340	0.009	0.1374
720 minute winter	Pr S03	1.002	Pr S06	0.9	0.442	0.012	0.2269
720 minute winter	Pr S06	1.003	Infiltration Tank	0.8	0.344	0.020	0.4679
720 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 1 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	Pr S01	495	36.764	0.014	0.3	0.0188	0.0000	OK
960 minute summer	Pr S05	465	36.724	0.014	0.3	0.0195	0.0000	OK
960 minute summer	Pr S04	675	36.571	0.044	0.5	0.0579	0.0000	OK
960 minute summer	Pr S02	495	36.580	0.017	0.5	0.0229	0.0000	OK
960 minute summer	Pr S03	675	36.571	0.096	1.0	0.1083	0.0000	OK
960 minute summer	Pr S06	675	36.571	0.241	1.0	0.2723	0.0000	SURCHARGED
960 minute summer	Infiltration Tank	675	36.571	0.311	0.9	7.4589	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
960 minute summer	Pr S01	1.000	Pr S02	0.3	0.256	0.007	0.0332
960 minute summer	Pr S05	2.000	Pr S04	0.3	0.256	0.007	0.0805
960 minute summer	Pr S04	2.001	Pr S03	0.5	0.360	0.012	0.0838
960 minute summer	Pr S02	1.001	Pr S03	0.5	0.359	0.012	0.0862
960 minute summer	Pr S03	1.002	Pr S06	1.0	0.442	0.014	0.2064
960 minute summer	Pr S06	1.003	Infiltration Tank	0.9	0.344	0.023	0.4679
960 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 1 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	Pr S01	420	36.761	0.011	0.2	0.0156	0.0000	OK
960 minute winter	Pr S05	405	36.721	0.011	0.2	0.0161	0.0000	OK
960 minute winter	Pr S04	735	36.595	0.068	0.4	0.0888	0.0000	OK
960 minute winter	Pr S02	735	36.595	0.032	0.3	0.0417	0.0000	OK
960 minute winter	Pr S03	735	36.595	0.120	0.7	0.1353	0.0000	OK
960 minute winter	Pr S06	735	36.595	0.265	0.7	0.2993	0.0000	SURCHARGED
960 minute winter	Infiltration Tank	735	36.595	0.335	0.6	8.0315	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
960 minute winter	Pr S01	1.000	Pr S02	0.2	0.235	0.005	0.0531
960 minute winter	Pr S05	2.000	Pr S04	0.2	0.236	0.005	0.1438
960 minute winter	Pr S04	2.001	Pr S03	0.4	0.333	0.009	0.1226
960 minute winter	Pr S02	1.001	Pr S03	0.3	0.314	0.007	0.1355
960 minute winter	Pr S03	1.002	Pr S06	0.7	0.422	0.010	0.2262
960 minute winter	Pr S06	1.003	Infiltration Tank	0.6	0.344	0.016	0.4679
960 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 1 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	Pr S01	720	36.761	0.011	0.2	0.0156	0.0000	OK
1440 minute summer	Pr S05	750	36.724	0.014	0.3	0.0195	0.0000	OK
1440 minute summer	Pr S04	960	36.572	0.045	0.5	0.0592	0.0000	OK
1440 minute summer	Pr S02	720	36.577	0.014	0.3	0.0181	0.0000	OK
1440 minute summer	Pr S03	960	36.572	0.097	0.8	0.1095	0.0000	OK
1440 minute summer	Pr S06	960	36.572	0.242	0.8	0.2735	0.0000	SURCHARGED
1440 minute summer	Infiltration Tank	960	36.572	0.312	0.7	7.4835	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute summer	Pr S01	1.000	Pr S02	0.2	0.233	0.005	0.0241
1440 minute summer	Pr S05	2.000	Pr S04	0.3	0.254	0.007	0.0829
1440 minute summer	Pr S04	2.001	Pr S03	0.5	0.366	0.012	0.0854
1440 minute summer	Pr S02	1.001	Pr S03	0.3	0.314	0.007	0.0880
1440 minute summer	Pr S03	1.002	Pr S06	0.8	0.396	0.011	0.2072
1440 minute summer	Pr S06	1.003	Infiltration Tank	0.7	0.368	0.018	0.4679
1440 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 1 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	Pr S01	750	36.761	0.011	0.2	0.0156	0.0000	OK
1440 minute winter	Pr S05	660	36.721	0.011	0.2	0.0161	0.0000	OK
1440 minute winter	Pr S04	1050	36.616	0.089	0.3	0.1164	0.0000	OK
1440 minute winter	Pr S02	1050	36.616	0.053	0.3	0.0692	0.0000	OK
1440 minute winter	Pr S03	1050	36.616	0.141	0.6	0.1594	0.0000	OK
1440 minute winter	Pr S06	1050	36.616	0.286	0.6	0.3234	0.0000	SURCHARGED
1440 minute winter	Infiltration Tank	1050	36.616	0.356	0.5	8.5416	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute winter	Pr S01	1.000	Pr S02	0.2	0.233	0.005	0.1050
1440 minute winter	Pr S05	2.000	Pr S04	0.2	0.236	0.005	0.2061
1440 minute winter	Pr S04	2.001	Pr S03	0.3	0.310	0.007	0.1586
1440 minute winter	Pr S02	1.001	Pr S03	0.3	0.314	0.007	0.1857
1440 minute winter	Pr S03	1.002	Pr S06	0.6	0.396	0.008	0.2436
1440 minute winter	Pr S06	1.003	Infiltration Tank	0.5	0.368	0.014	0.4679
1440 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	Pr S01	10	36.798	0.048	4.3	0.0659	0.0000	OK
15 minute summer	Pr S05	10	36.763	0.053	5.3	0.0760	0.0000	OK
15 minute summer	Pr S04	11	36.601	0.074	8.5	0.0966	0.0000	OK
15 minute summer	Pr S02	11	36.628	0.065	7.2	0.0853	0.0000	OK
15 minute summer	Pr S03	11	36.552	0.077	15.5	0.0869	0.0000	OK
15 minute summer	Pr S06	26	36.506	0.176	15.6	0.1995	0.0000	OK
15 minute summer	Infiltration Tank	25	36.506	0.246	15.5	5.9079	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute summer	Pr S01	1.000	Pr S02	4.2	0.544	0.100	0.2189
15 minute summer	Pr S05	2.000	Pr S04	5.2	0.572	0.123	0.2517
15 minute summer	Pr S04	2.001	Pr S03	8.4	0.721	0.198	0.0905
15 minute summer	Pr S02	1.001	Pr S03	7.1	0.729	0.169	0.1165
15 minute summer	Pr S03	1.002	Pr S06	15.6	1.089	0.213	0.1359
15 minute summer	Pr S06	1.003	Infiltration Tank	15.5	1.176	0.387	0.4304
15 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 30 year +10% CC 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	Pr S01	10	36.799	0.049	4.5	0.0674	0.0000	OK
15 minute winter	Pr S05	10	36.764	0.054	5.6	0.0779	0.0000	OK
15 minute winter	Pr S04	11	36.603	0.076	9.0	0.0996	0.0000	OK
15 minute winter	Pr S02	11	36.630	0.067	7.6	0.0874	0.0000	OK
15 minute winter	Pr S03	11	36.554	0.079	16.3	0.0897	0.0000	OK
15 minute winter	Pr S06	22	36.534	0.204	16.4	0.2310	0.0000	OK
15 minute winter	Infiltration Tank	24	36.533	0.273	16.4	6.5588	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	Pr S01	1.000	Pr S02	4.4	0.549	0.104	0.2267
15 minute winter	Pr S05	2.000	Pr S04	5.5	0.579	0.130	0.2618
15 minute winter	Pr S04	2.001	Pr S03	8.8	0.729	0.209	0.0944
15 minute winter	Pr S02	1.001	Pr S03	7.5	0.732	0.177	0.1216
15 minute winter	Pr S03	1.002	Pr S06	16.4	1.088	0.225	0.1719
15 minute winter	Pr S06	1.003	Infiltration Tank	16.4	1.228	0.411	0.4569
15 minute winter	Infiltration Tank	Infiltration		0.1			

Results for 30 year +10% CC 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	Pr S01	18	36.797	0.047	4.1	0.0649	0.0000	OK
30 minute summer	Pr S05	18	36.762	0.052	5.0	0.0743	0.0000	OK
30 minute summer	Pr S04	18	36.599	0.072	8.1	0.0946	0.0000	OK
30 minute summer	Pr S02	18	36.627	0.064	7.0	0.0841	0.0000	OK
30 minute summer	Pr S03	35	36.585	0.110	15.0	0.1239	0.0000	OK
30 minute summer	Pr S06	36	36.584	0.254	14.9	0.2872	0.0000	SURCHARGED
30 minute summer	Infiltration Tank	36	36.583	0.323	14.7	7.7569	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute summer	Pr S01	1.000	Pr S02	4.1	0.536	0.097	0.2152
30 minute summer	Pr S05	2.000	Pr S04	5.0	0.565	0.118	0.2449
30 minute summer	Pr S04	2.001	Pr S03	8.0	0.740	0.190	0.1045
30 minute summer	Pr S02	1.001	Pr S03	6.9	0.739	0.164	0.1132
30 minute summer	Pr S03	1.002	Pr S06	14.9	1.048	0.204	0.2178
30 minute summer	Pr S06	1.003	Infiltration Tank	14.7	0.955	0.368	0.4679
30 minute summer	Infiltration Tank	Infiltration		0.1			

Results for 30 year +10% CC 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	Pr S01	18	36.795	0.045	3.7	0.0617	0.0000	OK
30 minute winter	Pr S05	18	36.760	0.050	4.6	0.0712	0.0000	OK
30 minute winter	Pr S04	35	36.614	0.087	7.4	0.1132	0.0000	OK
30 minute winter	Pr S02	18	36.624	0.061	6.3	0.0796	0.0000	OK
30 minute winter	Pr S03	37	36.614	0.139	13.6	0.1571	0.0000	OK
30 minute winter	Pr S06	37	36.613	0.283	14.1	0.3205	0.0000	SURCHARGED
30 minute winter	Infiltration Tank	35	36.613	0.353	12.9	8.4618	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute winter	Pr S01	1.000	Pr S02	3.7	0.522	0.087	0.1995
30 minute winter	Pr S05	2.000	Pr S04	4.6	0.553	0.108	0.2291
30 minute winter	Pr S04	2.001	Pr S03	7.4	0.732	0.174	0.1543
30 minute winter	Pr S02	1.001	Pr S03	6.3	0.734	0.148	0.1785
30 minute winter	Pr S03	1.002	Pr S06	14.1	1.033	0.193	0.2420
30 minute winter	Pr S06	1.003	Infiltration Tank	12.9	1.005	0.323	0.4679
30 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	Pr S01	33	36.792	0.042	3.2	0.0575	0.0000	OK
60 minute summer	Pr S05	33	36.756	0.046	3.9	0.0656	0.0000	OK
60 minute summer	Pr S04	66	36.653	0.126	6.3	0.1643	0.0000	OK
60 minute summer	Pr S02	68	36.652	0.089	5.4	0.1163	0.0000	OK
60 minute summer	Pr S03	66	36.652	0.177	11.7	0.2007	0.0000	OK
60 minute summer	Pr S06	66	36.652	0.322	11.6	0.3645	0.0000	SURCHARGED
60 minute summer	Infiltration Tank	67	36.652	0.392	10.3	9.4174	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
60 minute summer	Pr S01	1.000	Pr S02	3.2	0.505	0.075	0.2130
60 minute summer	Pr S05	2.000	Pr S04	3.9	0.533	0.092	0.3229
60 minute summer	Pr S04	2.001	Pr S03	6.3	0.720	0.149	0.2198
60 minute summer	Pr S02	1.001	Pr S03	5.4	0.716	0.126	0.2762
60 minute summer	Pr S03	1.002	Pr S06	11.6	0.968	0.159	0.2711
60 minute summer	Pr S06	1.003	Infiltration Tank	10.3	0.826	0.259	0.4679
60 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	Pr S01	33	36.788	0.038	2.6	0.0520	0.0000	OK
60 minute winter	Pr S05	33	36.752	0.042	3.2	0.0596	0.0000	OK
60 minute winter	Pr S04	66	36.692	0.165	5.2	0.2144	0.0000	OK
60 minute winter	Pr S02	64	36.692	0.129	4.4	0.1666	0.0000	OK
60 minute winter	Pr S03	66	36.691	0.216	9.6	0.2448	0.0000	OK
60 minute winter	Pr S06	66	36.691	0.361	9.5	0.4088	0.0000	SURCHARGED
60 minute winter	Infiltration Tank	65	36.691	0.431	8.5	10.3557	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
60 minute winter	Pr S01	1.000	Pr S02	2.6	0.476	0.061	0.3359
60 minute winter	Pr S05	2.000	Pr S04	3.2	0.505	0.076	0.4362
60 minute winter	Pr S04	2.001	Pr S03	5.2	0.684	0.122	0.2741
60 minute winter	Pr S02	1.001	Pr S03	4.4	0.678	0.103	0.3666
60 minute winter	Pr S03	1.002	Pr S06	9.5	0.911	0.131	0.2920
60 minute winter	Pr S06	1.003	Infiltration Tank	8.5	0.869	0.213	0.4679
60 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 99.82%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	Pr S01	64	36.785	0.035	2.2	0.0479	0.0000	OK
120 minute summer	Pr S05	64	36.748	0.038	2.7	0.0549	0.0000	OK
120 minute summer	Pr S04	124	36.732	0.205	4.4	0.2668	0.0000	OK
120 minute summer	Pr S02	124	36.732	0.169	3.7	0.2187	0.0000	OK
120 minute summer	Pr S03	124	36.732	0.257	8.1	0.2907	0.0000	SURCHARGED
120 minute summer	Pr S06	124	36.732	0.402	7.7	0.4547	0.0000	SURCHARGED
120 minute summer	Infiltration Tank	126	36.732	0.472	7.0	11.3300	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute summer	Pr S01	1.000	Pr S02	2.2	0.455	0.052	0.4558
120 minute summer	Pr S05	2.000	Pr S04	2.7	0.488	0.064	0.5486
120 minute summer	Pr S04	2.001	Pr S03	4.4	0.647	0.103	0.3029
120 minute summer	Pr S02	1.001	Pr S03	3.7	0.646	0.087	0.4263
120 minute summer	Pr S03	1.002	Pr S06	7.7	0.703	0.106	0.2939
120 minute summer	Pr S06	1.003	Infiltration Tank	7.0	0.719	0.176	0.4679
120 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	Pr S01	64	36.781	0.031	1.7	0.0423	0.0000	OK
120 minute winter	Pr S05	122	36.780	0.070	2.1	0.0998	0.0000	OK
120 minute winter	Pr S04	122	36.780	0.253	3.4	0.3285	0.0000	SURCHARGED
120 minute winter	Pr S02	124	36.780	0.217	2.9	0.2799	0.0000	OK
120 minute winter	Pr S03	122	36.780	0.305	6.4	0.3445	0.0000	SURCHARGED
120 minute winter	Pr S06	122	36.780	0.450	6.0	0.5085	0.0000	SURCHARGED
120 minute winter	Infiltration Tank	122	36.780	0.520	6.0	12.4741	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute winter	Pr S01	1.000	Pr S02	1.7	0.431	0.040	0.5930
120 minute winter	Pr S05	2.000	Pr S04	2.1	0.469	0.050	0.6889
120 minute winter	Pr S04	2.001	Pr S03	3.5	0.600	0.082	0.3098
120 minute winter	Pr S02	1.001	Pr S03	2.9	0.595	0.069	0.4693
120 minute winter	Pr S03	1.002	Pr S06	6.0	0.721	0.082	0.2939
120 minute winter	Pr S06	1.003	Infiltration Tank	6.0	0.739	0.150	0.4679
120 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	Pr S01	96	36.781	0.031	1.7	0.0424	0.0000	OK
180 minute summer	Pr S05	188	36.778	0.068	2.1	0.0972	0.0000	OK
180 minute summer	Pr S04	188	36.778	0.251	3.4	0.3263	0.0000	SURCHARGED
180 minute summer	Pr S02	188	36.778	0.215	2.9	0.2776	0.0000	OK
180 minute summer	Pr S03	188	36.778	0.303	6.1	0.3426	0.0000	SURCHARGED
180 minute summer	Pr S06	188	36.778	0.448	5.2	0.5066	0.0000	SURCHARGED
180 minute summer	Infiltration Tank	188	36.778	0.518	4.5	12.4321	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
180 minute summer	Pr S01	1.000	Pr S02	1.7	0.431	0.040	0.5872
180 minute summer	Pr S05	2.000	Pr S04	2.1	0.450	0.050	0.6838
180 minute summer	Pr S04	2.001	Pr S03	3.3	0.572	0.077	0.3098
180 minute summer	Pr S02	1.001	Pr S03	2.9	0.567	0.068	0.4684
180 minute summer	Pr S03	1.002	Pr S06	5.2	0.614	0.072	0.2939
180 minute summer	Pr S06	1.003	Infiltration Tank	4.5	0.660	0.112	0.4679
180 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 99.46%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	Pr S01	184	36.832	0.082	1.3	0.1128	0.0000	OK
180 minute winter	Pr S05	184	36.831	0.121	1.6	0.1739	0.0000	OK
180 minute winter	Pr S04	184	36.831	0.304	2.6	0.4033	0.0000	SURCHARGED
180 minute winter	Pr S02	184	36.831	0.268	2.2	0.3467	0.0000	SURCHARGED
180 minute winter	Pr S03	184	36.832	0.356	4.4	0.4032	0.0000	SURCHARGED
180 minute winter	Pr S06	184	36.832	0.502	4.1	0.5672	0.0000	SURCHARGED
180 minute winter	Infiltration Tank	184	36.832	0.572	3.7	13.7186	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
180 minute winter	Pr S01	1.000	Pr S02	1.3	0.398	0.031	0.7392
180 minute winter	Pr S05	2.000	Pr S04	1.6	0.425	0.038	0.8452
180 minute winter	Pr S04	2.001	Pr S03	2.5	0.547	0.058	0.3098
180 minute winter	Pr S02	1.001	Pr S03	2.2	0.530	0.051	0.4723
180 minute winter	Pr S03	1.002	Pr S06	4.1	0.623	0.056	0.2939
180 minute winter	Pr S06	1.003	Infiltration Tank	3.7	0.637	0.092	0.4679
180 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 99.79%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	Pr S01	244	36.806	0.056	1.4	0.0776	0.0000	OK
240 minute summer	Pr S05	244	36.806	0.096	1.8	0.1376	0.0000	OK
240 minute summer	Pr S04	244	36.806	0.279	2.9	0.3633	0.0000	SURCHARGED
240 minute summer	Pr S02	244	36.806	0.243	2.4	0.3140	0.0000	SURCHARGED
240 minute summer	Pr S03	244	36.806	0.331	4.8	0.3745	0.0000	SURCHARGED
240 minute summer	Pr S06	244	36.806	0.476	4.2	0.5385	0.0000	SURCHARGED
240 minute summer	Infiltration Tank	244	36.806	0.546	3.7	13.1084	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
240 minute summer	Pr S01	1.000	Pr S02	1.4	0.406	0.033	0.6656
240 minute summer	Pr S05	2.000	Pr S04	1.8	0.441	0.042	0.7672
240 minute summer	Pr S04	2.001	Pr S03	2.6	0.541	0.062	0.3098
240 minute summer	Pr S02	1.001	Pr S03	2.4	0.535	0.056	0.4723
240 minute summer	Pr S03	1.002	Pr S06	4.2	0.522	0.057	0.2939
240 minute summer	Pr S06	1.003	Infiltration Tank	3.7	0.651	0.092	0.4679
240 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 99.16%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	Pr S01	240	36.859	0.109	1.1	0.1511	0.0000	OK
240 minute winter	Pr S05	240	36.859	0.149	1.3	0.2136	0.0000	OK
240 minute winter	Pr S04	240	36.859	0.332	2.1	0.4492	0.0000	SURCHARGED
240 minute winter	Pr S02	240	36.859	0.296	1.9	0.3892	0.0000	SURCHARGED
240 minute winter	Pr S03	240	36.859	0.384	3.8	0.4345	0.0000	SURCHARGED
240 minute winter	Pr S06	240	36.859	0.529	3.3	0.5985	0.0000	SURCHARGED
240 minute winter	Infiltration Tank	240	36.859	0.599	3.1	14.3810	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
240 minute winter	Pr S01	1.000	Pr S02	1.1	0.368	0.026	0.8253
240 minute winter	Pr S05	2.000	Pr S04	1.3	0.407	0.031	0.9287
240 minute winter	Pr S04	2.001	Pr S03	2.1	0.508	0.049	0.3098
240 minute winter	Pr S02	1.001	Pr S03	1.7	0.495	0.040	0.4723
240 minute winter	Pr S03	1.002	Pr S06	3.3	0.580	0.045	0.2939
240 minute winter	Pr S06	1.003	Infiltration Tank	3.1	0.621	0.078	0.4679
240 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 99.25%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	Pr S01	368	36.853	0.103	1.1	0.1426	0.0000	OK
360 minute summer	Pr S05	368	36.853	0.143	1.4	0.2050	0.0000	OK
360 minute summer	Pr S04	368	36.853	0.326	2.3	0.4383	0.0000	SURCHARGED
360 minute summer	Pr S02	368	36.853	0.290	1.9	0.3794	0.0000	SURCHARGED
360 minute summer	Pr S03	368	36.853	0.378	3.5	0.4276	0.0000	SURCHARGED
360 minute summer	Pr S06	368	36.853	0.523	2.9	0.5916	0.0000	SURCHARGED
360 minute summer	Infiltration Tank	368	36.853	0.593	3.1	14.2342	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
360 minute summer	Pr S01	1.000	Pr S02	1.1	0.367	0.026	0.8058
360 minute summer	Pr S05	2.000	Pr S04	1.4	0.400	0.033	0.9109
360 minute summer	Pr S04	2.001	Pr S03	1.9	0.488	0.044	0.3098
360 minute summer	Pr S02	1.001	Pr S03	1.7	0.483	0.039	0.4723
360 minute summer	Pr S03	1.002	Pr S06	2.9	0.445	0.040	0.2939
360 minute summer	Pr S06	1.003	Infiltration Tank	3.1	0.601	0.079	0.4679
360 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 98.78%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	Pr S01	360	36.921	0.171	0.8	0.2361	0.0000	OK
360 minute winter	Pr S05	360	36.921	0.211	1.0	0.3019	0.0000	OK
360 minute winter	Pr S04	360	36.921	0.394	1.6	0.5610	0.0000	SURCHARGED
360 minute winter	Pr S02	360	36.921	0.358	1.4	0.4904	0.0000	SURCHARGED
360 minute winter	Pr S03	360	36.921	0.446	2.6	0.5041	0.0000	SURCHARGED
360 minute winter	Pr S06	360	36.921	0.591	2.4	0.6681	0.0000	SURCHARGED
360 minute winter	Infiltration Tank	360	36.921	0.661	2.1	15.8574	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
360 minute winter	Pr S01	1.000	Pr S02	0.8	0.329	0.019	1.0105
360 minute winter	Pr S05	2.000	Pr S04	1.0	0.370	0.024	1.0762
360 minute winter	Pr S04	2.001	Pr S03	1.4	0.467	0.034	0.3098
360 minute winter	Pr S02	1.001	Pr S03	1.2	0.443	0.028	0.4723
360 minute winter	Pr S03	1.002	Pr S06	2.4	0.506	0.033	0.2939
360 minute winter	Pr S06	1.003	Infiltration Tank	2.1	0.513	0.053	0.4679
360 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 98.94%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	Pr S01	488	36.895	0.145	0.9	0.2009	0.0000	OK
480 minute summer	Pr S05	488	36.895	0.185	1.1	0.2655	0.0000	OK
480 minute summer	Pr S04	488	36.895	0.368	1.8	0.5109	0.0000	SURCHARGED
480 minute summer	Pr S02	488	36.895	0.332	1.5	0.4474	0.0000	SURCHARGED
480 minute summer	Pr S03	488	36.895	0.420	2.6	0.4753	0.0000	SURCHARGED
480 minute summer	Pr S06	488	36.895	0.565	2.3	0.6393	0.0000	SURCHARGED
480 minute summer	Infiltration Tank	488	36.895	0.635	2.2	15.2461	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
480 minute summer	Pr S01	1.000	Pr S02	0.9	0.350	0.021	0.9372
480 minute summer	Pr S05	2.000	Pr S04	1.1	0.351	0.026	1.0256
480 minute summer	Pr S04	2.001	Pr S03	1.4	0.437	0.033	0.3098
480 minute summer	Pr S02	1.001	Pr S03	1.3	0.438	0.030	0.4723
480 minute summer	Pr S03	1.002	Pr S06	2.3	0.424	0.032	0.2939
480 minute summer	Pr S06	1.003	Infiltration Tank	2.2	0.601	0.054	0.4679
480 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 98.74%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	Pr S01	472	36.967	0.217	0.7	0.3004	0.0000	OK
480 minute winter	Pr S05	472	36.967	0.257	0.8	0.3686	0.0000	SURCHARGED
480 minute winter	Pr S04	472	36.967	0.440	1.3	0.6738	0.0000	SURCHARGED
480 minute winter	Pr S02	472	36.967	0.404	1.2	0.5796	0.0000	SURCHARGED
480 minute winter	Pr S03	472	36.967	0.492	2.0	0.5567	0.0000	SURCHARGED
480 minute winter	Pr S06	472	36.967	0.637	1.7	0.7207	0.0000	SURCHARGED
480 minute winter	Infiltration Tank	472	36.967	0.707	1.6	16.9732	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
480 minute winter	Pr S01	1.000	Pr S02	0.7	0.317	0.017	1.1085
480 minute winter	Pr S05	2.000	Pr S04	0.8	0.339	0.019	1.0913
480 minute winter	Pr S04	2.001	Pr S03	1.1	0.430	0.026	0.3098
480 minute winter	Pr S02	1.001	Pr S03	1.0	0.418	0.023	0.4723
480 minute winter	Pr S03	1.002	Pr S06	1.7	0.445	0.024	0.2939
480 minute winter	Pr S06	1.003	Infiltration Tank	1.6	0.576	0.041	0.4679
480 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 98.80%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	Pr S01	600	36.945	0.195	0.7	0.2698	0.0000	OK
600 minute summer	Pr S05	600	36.945	0.235	0.9	0.3369	0.0000	SURCHARGED
600 minute summer	Pr S04	600	36.945	0.418	1.5	0.6181	0.0000	SURCHARGED
600 minute summer	Pr S02	600	36.945	0.382	1.2	0.5346	0.0000	SURCHARGED
600 minute summer	Pr S03	600	36.945	0.470	2.2	0.5317	0.0000	SURCHARGED
600 minute summer	Pr S06	600	36.945	0.615	1.9	0.6956	0.0000	SURCHARGED
600 minute summer	Infiltration Tank	600	36.945	0.685	1.8	16.4417	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
600 minute summer	Pr S01	1.000	Pr S02	0.7	0.318	0.017	1.0702
600 minute summer	Pr S05	2.000	Pr S04	0.9	0.318	0.021	1.0913
600 minute summer	Pr S04	2.001	Pr S03	1.2	0.400	0.029	0.3098
600 minute summer	Pr S02	1.001	Pr S03	1.0	0.395	0.023	0.4723
600 minute summer	Pr S03	1.002	Pr S06	1.9	0.396	0.026	0.2939
600 minute summer	Pr S06	1.003	Infiltration Tank	1.8	0.456	0.044	0.4679
600 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 98.82%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	Pr S01	585	36.992	0.242	0.6	0.3347	0.0000	SURCHARGED
600 minute winter	Pr S05	585	36.992	0.282	0.7	0.4041	0.0000	SURCHARGED
600 minute winter	Pr S04	585	36.992	0.465	1.1	0.7361	0.0000	SURCHARGED
600 minute winter	Pr S02	585	36.992	0.429	1.0	0.6412	0.0000	SURCHARGED
600 minute winter	Pr S03	585	36.992	0.517	1.6	0.5848	0.0000	SURCHARGED
600 minute winter	Pr S06	585	36.992	0.662	1.5	0.7487	0.0000	SURCHARGED
600 minute winter	Infiltration Tank	585	36.992	0.732	1.4	17.5686	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
600 minute winter	Pr S01	1.000	Pr S02	0.6	0.305	0.014	1.1149
600 minute winter	Pr S05	2.000	Pr S04	0.7	0.307	0.017	1.0913
600 minute winter	Pr S04	2.001	Pr S03	0.9	0.401	0.021	0.3098
600 minute winter	Pr S02	1.001	Pr S03	0.8	0.395	0.019	0.4723
600 minute winter	Pr S03	1.002	Pr S06	1.5	0.422	0.020	0.2939
600 minute winter	Pr S06	1.003	Infiltration Tank	1.4	0.426	0.035	0.4679
600 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 98.83%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	Pr S01	720	36.952	0.202	0.7	0.2788	0.0000	OK
720 minute summer	Pr S05	720	36.952	0.242	0.8	0.3462	0.0000	SURCHARGED
720 minute summer	Pr S04	720	36.952	0.425	1.3	0.6337	0.0000	SURCHARGED
720 minute summer	Pr S02	720	36.952	0.389	1.2	0.5472	0.0000	SURCHARGED
720 minute summer	Pr S03	720	36.952	0.477	1.9	0.5390	0.0000	SURCHARGED
720 minute summer	Pr S06	720	36.952	0.622	1.7	0.7030	0.0000	SURCHARGED
720 minute summer	Infiltration Tank	720	36.952	0.692	1.6	16.5974	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
720 minute summer	Pr S01	1.000	Pr S02	0.7	0.318	0.017	1.0835
720 minute summer	Pr S05	2.000	Pr S04	0.8	0.318	0.019	1.0913
720 minute summer	Pr S04	2.001	Pr S03	1.0	0.400	0.023	0.3098
720 minute summer	Pr S02	1.001	Pr S03	1.0	0.395	0.023	0.4723
720 minute summer	Pr S03	1.002	Pr S06	1.7	0.396	0.023	0.2939
720 minute summer	Pr S06	1.003	Infiltration Tank	1.6	0.462	0.040	0.4679
720 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 98.98%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	Pr S01	705	37.044	0.294	0.5	0.4073	0.0000	SURCHARGED
720 minute winter	Pr S05	705	37.044	0.334	0.6	0.4793	0.0000	SURCHARGED
720 minute winter	Pr S04	705	37.044	0.517	1.0	0.8698	0.0000	SURCHARGED
720 minute winter	Pr S02	705	37.044	0.481	0.9	0.7750	0.0000	SURCHARGED
720 minute winter	Pr S03	705	37.044	0.569	1.5	0.6441	0.0000	SURCHARGED
720 minute winter	Pr S06	705	37.044	0.714	1.4	0.8081	0.0000	SURCHARGED
720 minute winter	Infiltration Tank	705	37.044	0.784	1.3	18.8277	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
720 minute winter	Pr S01	1.000	Pr S02	0.5	0.275	0.012	1.1149
720 minute winter	Pr S05	2.000	Pr S04	0.6	0.306	0.014	1.0913
720 minute winter	Pr S04	2.001	Pr S03	0.8	0.374	0.019	0.3098
720 minute winter	Pr S02	1.001	Pr S03	0.7	0.359	0.017	0.4723
720 minute winter	Pr S03	1.002	Pr S06	1.4	0.396	0.019	0.2939
720 minute winter	Pr S06	1.003	Infiltration Tank	1.3	0.438	0.033	0.4679
720 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 98.91%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	Pr S01	930	36.956	0.206	0.6	0.2842	0.0000	OK
960 minute summer	Pr S05	930	36.956	0.246	0.7	0.3518	0.0000	SURCHARGED
960 minute summer	Pr S04	930	36.956	0.429	1.1	0.6440	0.0000	SURCHARGED
960 minute summer	Pr S02	930	36.956	0.393	1.0	0.5550	0.0000	SURCHARGED
960 minute summer	Pr S03	930	36.956	0.481	1.6	0.5435	0.0000	SURCHARGED
960 minute summer	Pr S06	930	36.956	0.626	1.4	0.7075	0.0000	SURCHARGED
960 minute summer	Infiltration Tank	930	36.956	0.696	1.4	16.6925	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
960 minute summer	Pr S01	1.000	Pr S02	0.6	0.275	0.014	1.0909
960 minute summer	Pr S05	2.000	Pr S04	0.7	0.306	0.017	1.0913
960 minute summer	Pr S04	2.001	Pr S03	0.9	0.348	0.021	0.3098
960 minute summer	Pr S02	1.001	Pr S03	0.7	0.359	0.017	0.4723
960 minute summer	Pr S03	1.002	Pr S06	1.4	0.396	0.020	0.2939
960 minute summer	Pr S06	1.003	Infiltration Tank	1.4	0.405	0.034	0.4679
960 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 99.10%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	Pr S01	915	37.102	0.352	0.4	0.4866	0.0000	SURCHARGED
960 minute winter	Pr S05	915	37.102	0.392	0.5	0.5615	0.0000	SURCHARGED
960 minute winter	Pr S04	915	37.102	0.575	0.8	1.0151	0.0000	SURCHARGED
960 minute winter	Pr S02	915	37.102	0.539	0.7	0.9207	0.0000	SURCHARGED
960 minute winter	Pr S03	915	37.102	0.627	1.2	0.7090	0.0000	SURCHARGED
960 minute winter	Pr S06	915	37.102	0.772	1.1	0.8729	0.0000	SURCHARGED
960 minute winter	Infiltration Tank	915	37.102	0.842	1.1	20.2041	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
960 minute winter	Pr S01	1.000	Pr S02	0.4	0.258	0.009	1.1149
960 minute winter	Pr S05	2.000	Pr S04	0.5	0.291	0.012	1.0913
960 minute winter	Pr S04	2.001	Pr S03	0.7	0.350	0.016	0.3098
960 minute winter	Pr S02	1.001	Pr S03	0.5	0.340	0.013	0.4723
960 minute winter	Pr S03	1.002	Pr S06	1.1	0.396	0.015	0.2939
960 minute winter	Pr S06	1.003	Infiltration Tank	1.1	0.390	0.027	0.4679
960 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.12%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	Pr S01	1170	36.955	0.205	0.4	0.2838	0.0000	OK
1440 minute summer	Pr S05	1170	36.955	0.245	0.5	0.3514	0.0000	SURCHARGED
1440 minute summer	Pr S04	1170	36.955	0.428	0.8	0.6432	0.0000	SURCHARGED
1440 minute summer	Pr S02	1170	36.955	0.392	0.7	0.5544	0.0000	SURCHARGED
1440 minute summer	Pr S03	1170	36.955	0.480	1.1	0.5431	0.0000	SURCHARGED
1440 minute summer	Pr S06	1170	36.955	0.625	1.1	0.7071	0.0000	SURCHARGED
1440 minute summer	Infiltration Tank	1170	36.955	0.695	1.0	16.6855	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute summer	Pr S01	1.000	Pr S02	0.4	0.257	0.009	1.0903
1440 minute summer	Pr S05	2.000	Pr S04	0.5	0.291	0.012	1.0913
1440 minute summer	Pr S04	2.001	Pr S03	0.6	0.351	0.015	0.3098
1440 minute summer	Pr S02	1.001	Pr S03	0.5	0.339	0.013	0.4723
1440 minute summer	Pr S03	1.002	Pr S06	1.1	0.394	0.014	0.2939
1440 minute summer	Pr S06	1.003	Infiltration Tank	1.0	0.368	0.025	0.4679
1440 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 30 year +10% CC 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 99.15%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	Pr S01	1350	37.065	0.315	0.3	0.4363	0.0000	SURCHARGED
1440 minute winter	Pr S05	1350	37.065	0.355	0.4	0.5094	0.0000	SURCHARGED
1440 minute winter	Pr S04	1350	37.065	0.538	0.6	0.9228	0.0000	SURCHARGED
1440 minute winter	Pr S02	1350	37.065	0.502	0.5	0.8286	0.0000	SURCHARGED
1440 minute winter	Pr S03	1350	37.065	0.590	0.9	0.6678	0.0000	SURCHARGED
1440 minute winter	Pr S06	1350	37.065	0.735	0.8	0.8318	0.0000	SURCHARGED
1440 minute winter	Infiltration Tank	1350	37.065	0.805	0.8	19.3313	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute winter	Pr S01	1.000	Pr S02	0.3	0.257	0.007	1.1149
1440 minute winter	Pr S05	2.000	Pr S04	0.4	0.258	0.009	1.0913
1440 minute winter	Pr S04	2.001	Pr S03	0.5	0.349	0.012	0.3098
1440 minute winter	Pr S02	1.001	Pr S03	0.5	0.314	0.012	0.4723
1440 minute winter	Pr S03	1.002	Pr S06	0.8	0.392	0.012	0.2939
1440 minute winter	Pr S06	1.003	Infiltration Tank	0.8	0.368	0.020	0.4679
1440 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 15 minute summer. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute summer	Pr S01	10	36.807	0.057	6.1	0.0786	0.0000	OK
15 minute summer	Pr S05	10	36.773	0.063	7.5	0.0906	0.0000	OK
15 minute summer	Pr S04	11	36.617	0.090	12.0	0.1184	0.0000	OK
15 minute summer	Pr S02	11	36.643	0.080	10.3	0.1037	0.0000	OK
15 minute summer	Pr S03	21	36.593	0.118	22.0	0.1338	0.0000	OK
15 minute summer	Pr S06	21	36.593	0.263	22.0	0.2970	0.0000	SURCHARGED
15 minute summer	Infiltration Tank	24	36.591	0.331	21.7	7.9485	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute summer	Pr S01	1.000	Pr S02	6.0	0.591	0.141	0.2857
15 minute summer	Pr S05	2.000	Pr S04	7.4	0.621	0.175	0.3285
15 minute summer	Pr S04	2.001	Pr S03	11.8	0.766	0.279	0.1212
15 minute summer	Pr S02	1.001	Pr S03	10.1	0.780	0.240	0.1591
15 minute summer	Pr S03	1.002	Pr S06	22.0	1.146	0.302	0.2251
15 minute summer	Pr S06	1.003	Infiltration Tank	21.7	1.201	0.543	0.4679
15 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 15 minute winter. 255 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
15 minute winter	Pr S01	10	36.808	0.058	6.4	0.0804	0.0000	OK
15 minute winter	Pr S05	10	36.775	0.065	7.9	0.0927	0.0000	OK
15 minute winter	Pr S04	20	36.623	0.096	12.6	0.1250	0.0000	OK
15 minute winter	Pr S02	10	36.644	0.081	10.8	0.1059	0.0000	OK
15 minute winter	Pr S03	23	36.622	0.147	22.9	0.1661	0.0000	OK
15 minute winter	Pr S06	23	36.621	0.291	23.0	0.3293	0.0000	SURCHARGED
15 minute winter	Infiltration Tank	22	36.620	0.360	22.1	8.6430	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
15 minute winter	Pr S01	1.000	Pr S02	6.3	0.599	0.148	0.2950
15 minute winter	Pr S05	2.000	Pr S04	7.7	0.627	0.183	0.3407
15 minute winter	Pr S04	2.001	Pr S03	12.4	0.782	0.292	0.1687
15 minute winter	Pr S02	1.001	Pr S03	10.5	0.794	0.249	0.1963
15 minute winter	Pr S03	1.002	Pr S06	23.0	1.145	0.314	0.2483
15 minute winter	Pr S06	1.003	Infiltration Tank	22.1	1.277	0.553	0.4679
15 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 30 minute summer. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute summer	Pr S01	18	36.806	0.056	5.8	0.0772	0.0000	OK
30 minute summer	Pr S05	18	36.772	0.062	7.2	0.0892	0.0000	OK
30 minute summer	Pr S04	38	36.686	0.159	11.6	0.2073	0.0000	OK
30 minute summer	Pr S02	36	36.686	0.123	9.9	0.1596	0.0000	OK
30 minute summer	Pr S03	38	36.685	0.210	21.3	0.2372	0.0000	OK
30 minute summer	Pr S06	37	36.685	0.355	21.5	0.4011	0.0000	SURCHARGED
30 minute summer	Infiltration Tank	37	36.684	0.424	19.3	10.1871	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute summer	Pr S01	1.000	Pr S02	5.8	0.584	0.137	0.3179
30 minute summer	Pr S05	2.000	Pr S04	7.2	0.616	0.170	0.4238
30 minute summer	Pr S04	2.001	Pr S03	11.5	0.836	0.272	0.2671
30 minute summer	Pr S02	1.001	Pr S03	9.8	0.830	0.233	0.3536
30 minute summer	Pr S03	1.002	Pr S06	21.5	1.077	0.295	0.2895
30 minute summer	Pr S06	1.003	Infiltration Tank	19.3	1.031	0.483	0.4679
30 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 99.72%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
30 minute winter	Pr S01	18	36.803	0.053	5.2	0.0731	0.0000	OK
30 minute winter	Pr S05	18	36.769	0.059	6.5	0.0848	0.0000	OK
30 minute winter	Pr S04	35	36.728	0.201	10.5	0.2613	0.0000	OK
30 minute winter	Pr S02	36	36.728	0.165	8.9	0.2141	0.0000	OK
30 minute winter	Pr S03	35	36.728	0.253	19.6	0.2861	0.0000	SURCHARGED
30 minute winter	Pr S06	34	36.728	0.398	19.8	0.4500	0.0000	SURCHARGED
30 minute winter	Infiltration Tank	34	36.728	0.468	17.5	11.2400	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
30 minute winter	Pr S01	1.000	Pr S02	5.2	0.569	0.123	0.4490
30 minute winter	Pr S05	2.000	Pr S04	6.5	0.605	0.153	0.5354
30 minute winter	Pr S04	2.001	Pr S03	10.6	0.823	0.251	0.3007
30 minute winter	Pr S02	1.001	Pr S03	8.9	0.815	0.211	0.4220
30 minute winter	Pr S03	1.002	Pr S06	19.8	1.052	0.272	0.2939
30 minute winter	Pr S06	1.003	Infiltration Tank	17.5	1.070	0.439	0.4679
30 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 60 minute summer. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute summer	Pr S01	33	36.799	0.049	4.5	0.0680	0.0000	OK
60 minute summer	Pr S05	65	36.787	0.077	5.6	0.1107	0.0000	OK
60 minute summer	Pr S04	65	36.787	0.260	9.1	0.3383	0.0000	SURCHARGED
60 minute summer	Pr S02	65	36.787	0.224	7.7	0.2895	0.0000	OK
60 minute summer	Pr S03	65	36.787	0.312	16.5	0.3530	0.0000	SURCHARGED
60 minute summer	Pr S06	64	36.787	0.457	16.0	0.5170	0.0000	SURCHARGED
60 minute summer	Infiltration Tank	64	36.787	0.527	14.4	12.6518	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
60 minute summer	Pr S01	1.000	Pr S02	4.5	0.562	0.106	0.6165
60 minute summer	Pr S05	2.000	Pr S04	5.6	0.585	0.132	0.7110
60 minute summer	Pr S04	2.001	Pr S03	8.9	0.787	0.211	0.3098
60 minute summer	Pr S02	1.001	Pr S03	7.7	0.779	0.181	0.4721
60 minute summer	Pr S03	1.002	Pr S06	16.0	0.913	0.219	0.2939
60 minute summer	Pr S06	1.003	Infiltration Tank	14.4	0.923	0.359	0.4679
60 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 99.38%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
60 minute winter	Pr S01	64	36.838	0.088	3.7	0.1218	0.0000	OK
60 minute winter	Pr S05	63	36.838	0.128	4.5	0.1833	0.0000	OK
60 minute winter	Pr S04	65	36.838	0.311	7.3	0.4139	0.0000	SURCHARGED
60 minute winter	Pr S02	64	36.838	0.275	6.3	0.3550	0.0000	SURCHARGED
60 minute winter	Pr S03	64	36.838	0.363	14.0	0.4100	0.0000	SURCHARGED
60 minute winter	Pr S06	64	36.838	0.508	12.8	0.5741	0.0000	SURCHARGED
60 minute winter	Infiltration Tank	63	36.838	0.578	11.9	13.8649	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
60 minute winter	Pr S01	1.000	Pr S02	3.7	0.541	0.087	0.7591
60 minute winter	Pr S05	2.000	Pr S04	4.5	0.551	0.106	0.8653
60 minute winter	Pr S04	2.001	Pr S03	7.4	0.739	0.174	0.3098
60 minute winter	Pr S02	1.001	Pr S03	6.6	0.736	0.156	0.4723
60 minute winter	Pr S03	1.002	Pr S06	12.8	0.918	0.176	0.2939
60 minute winter	Pr S06	1.003	Infiltration Tank	11.9	0.947	0.297	0.4679
60 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 98.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute summer	Pr S01	126	36.891	0.141	3.1	0.1944	0.0000	OK
120 minute summer	Pr S05	126	36.890	0.180	3.8	0.2586	0.0000	OK
120 minute summer	Pr S04	126	36.891	0.364	6.1	0.5023	0.0000	SURCHARGED
120 minute summer	Pr S02	126	36.891	0.328	5.3	0.4398	0.0000	SURCHARGED
120 minute summer	Pr S03	126	36.891	0.416	10.2	0.4700	0.0000	SURCHARGED
120 minute summer	Pr S06	126	36.891	0.561	8.5	0.6341	0.0000	SURCHARGED
120 minute summer	Infiltration Tank	126	36.891	0.631	8.9	15.1367	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute summer	Pr S01	1.000	Pr S02	3.1	0.513	0.073	0.9230
120 minute summer	Pr S05	2.000	Pr S04	3.8	0.521	0.090	1.0141
120 minute summer	Pr S04	2.001	Pr S03	5.5	0.661	0.130	0.3098
120 minute summer	Pr S02	1.001	Pr S03	5.1	0.654	0.121	0.4723
120 minute summer	Pr S03	1.002	Pr S06	8.5	0.674	0.117	0.2939
120 minute summer	Pr S06	1.003	Infiltration Tank	8.9	0.763	0.223	0.4679
120 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 98.60%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
120 minute winter	Pr S01	124	36.964	0.214	2.4	0.2955	0.0000	OK
120 minute winter	Pr S05	122	36.964	0.254	2.9	0.3634	0.0000	SURCHARGED
120 minute winter	Pr S04	122	36.964	0.437	4.7	0.6652	0.0000	SURCHARGED
120 minute winter	Pr S02	124	36.964	0.401	4.1	0.5719	0.0000	SURCHARGED
120 minute winter	Pr S03	124	36.964	0.489	7.7	0.5526	0.0000	SURCHARGED
120 minute winter	Pr S06	124	36.964	0.634	7.0	0.7167	0.0000	SURCHARGED
120 minute winter	Infiltration Tank	124	36.964	0.704	6.7	16.8907	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
120 minute winter	Pr S01	1.000	Pr S02	2.4	0.465	0.057	1.1040
120 minute winter	Pr S05	2.000	Pr S04	2.9	0.496	0.068	1.0913
120 minute winter	Pr S04	2.001	Pr S03	4.2	0.626	0.098	0.3098
120 minute winter	Pr S02	1.001	Pr S03	3.7	0.623	0.088	0.4723
120 minute winter	Pr S03	1.002	Pr S06	7.0	0.714	0.096	0.2939
120 minute winter	Pr S06	1.003	Infiltration Tank	6.7	0.773	0.169	0.4679
120 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 98.62%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute summer	Pr S01	188	36.965	0.215	2.3	0.2973	0.0000	OK
180 minute summer	Pr S05	188	36.965	0.255	2.9	0.3653	0.0000	SURCHARGED
180 minute summer	Pr S04	188	36.965	0.438	4.7	0.6685	0.0000	SURCHARGED
180 minute summer	Pr S02	188	36.965	0.402	3.9	0.5747	0.0000	SURCHARGED
180 minute summer	Pr S03	188	36.965	0.490	6.3	0.5542	0.0000	SURCHARGED
180 minute summer	Pr S06	188	36.965	0.635	6.7	0.7182	0.0000	SURCHARGED
180 minute summer	Infiltration Tank	188	36.965	0.705	5.4	16.9219	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
180 minute summer	Pr S01	1.000	Pr S02	2.3	0.452	0.054	1.1057
180 minute summer	Pr S05	2.000	Pr S04	2.9	0.473	0.068	1.0913
180 minute summer	Pr S04	2.001	Pr S03	3.7	0.561	0.088	0.3098
180 minute summer	Pr S02	1.001	Pr S03	3.3	0.559	0.077	0.4723
180 minute summer	Pr S03	1.002	Pr S06	6.7	0.572	0.092	0.2939
180 minute summer	Pr S06	1.003	Infiltration Tank	5.4	0.721	0.136	0.4679
180 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 98.84%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
180 minute winter	Pr S01	184	37.047	0.297	1.8	0.4107	0.0000	SURCHARGED
180 minute winter	Pr S05	184	37.047	0.337	2.2	0.4828	0.0000	SURCHARGED
180 minute winter	Pr S04	184	37.047	0.520	3.6	0.8757	0.0000	SURCHARGED
180 minute winter	Pr S02	184	37.047	0.484	3.1	0.7815	0.0000	SURCHARGED
180 minute winter	Pr S03	184	37.047	0.572	5.3	0.6469	0.0000	SURCHARGED
180 minute winter	Pr S06	184	37.047	0.717	4.9	0.8109	0.0000	SURCHARGED
180 minute winter	Infiltration Tank	184	37.047	0.787	4.4	18.8895	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
180 minute winter	Pr S01	1.000	Pr S02	1.8	0.425	0.043	1.1149
180 minute winter	Pr S05	2.000	Pr S04	2.2	0.448	0.052	1.0913
180 minute winter	Pr S04	2.001	Pr S03	2.8	0.561	0.067	0.3098
180 minute winter	Pr S02	1.001	Pr S03	2.7	0.554	0.063	0.4723
180 minute winter	Pr S03	1.002	Pr S06	4.9	0.610	0.067	0.2939
180 minute winter	Pr S06	1.003	Infiltration Tank	4.4	0.687	0.111	0.4679
180 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 98.75%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute summer	Pr S01	248	37.011	0.261	2.0	0.3613	0.0000	SURCHARGED
240 minute summer	Pr S05	248	37.011	0.301	2.5	0.4317	0.0000	SURCHARGED
240 minute summer	Pr S04	248	37.011	0.484	4.0	0.7849	0.0000	SURCHARGED
240 minute summer	Pr S02	248	37.011	0.448	3.4	0.6904	0.0000	SURCHARGED
240 minute summer	Pr S03	248	37.011	0.536	5.5	0.6066	0.0000	SURCHARGED
240 minute summer	Pr S06	248	37.011	0.681	4.8	0.7706	0.0000	SURCHARGED
240 minute summer	Infiltration Tank	248	37.011	0.751	4.6	18.0325	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
240 minute summer	Pr S01	1.000	Pr S02	2.0	0.424	0.047	1.1149
240 minute summer	Pr S05	2.000	Pr S04	2.5	0.438	0.058	1.0913
240 minute summer	Pr S04	2.001	Pr S03	3.3	0.528	0.078	0.3098
240 minute summer	Pr S02	1.001	Pr S03	2.6	0.527	0.062	0.4723
240 minute summer	Pr S03	1.002	Pr S06	4.8	0.522	0.066	0.2939
240 minute summer	Pr S06	1.003	Infiltration Tank	4.6	0.660	0.115	0.4679
240 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 98.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
240 minute winter	Pr S01	244	37.120	0.370	1.5	0.5121	0.0000	SURCHARGED
240 minute winter	Pr S05	244	37.120	0.410	1.8	0.5880	0.0000	SURCHARGED
240 minute winter	Pr S04	244	37.120	0.593	2.9	1.0618	0.0000	SURCHARGED
240 minute winter	Pr S02	244	37.120	0.557	2.5	0.9677	0.0000	SURCHARGED
240 minute winter	Pr S03	244	37.120	0.645	4.0	0.7299	0.0000	SURCHARGED
240 minute winter	Pr S06	244	37.120	0.790	3.9	0.8939	0.0000	SURCHARGED
240 minute winter	Infiltration Tank	244	37.120	0.860	3.6	20.6491	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
240 minute winter	Pr S01	1.000	Pr S02	1.5	0.391	0.035	1.1149
240 minute winter	Pr S05	2.000	Pr S04	1.8	0.407	0.043	1.0913
240 minute winter	Pr S04	2.001	Pr S03	2.3	0.508	0.054	0.3098
240 minute winter	Pr S02	1.001	Pr S03	2.0	0.512	0.047	0.4723
240 minute winter	Pr S03	1.002	Pr S06	3.9	0.550	0.053	0.2939
240 minute winter	Pr S06	1.003	Infiltration Tank	3.6	0.619	0.090	0.4679
240 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 98.95%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute summer	Pr S01	368	37.086	0.336	1.5	0.4651	0.0000	SURCHARGED
360 minute summer	Pr S05	368	37.086	0.376	1.9	0.5393	0.0000	SURCHARGED
360 minute summer	Pr S04	368	37.086	0.559	3.1	0.9755	0.0000	SURCHARGED
360 minute summer	Pr S02	368	37.086	0.523	2.6	0.8818	0.0000	SURCHARGED
360 minute summer	Pr S03	368	37.086	0.611	4.2	0.6914	0.0000	SURCHARGED
360 minute summer	Pr S06	368	37.086	0.756	3.9	0.8554	0.0000	SURCHARGED
360 minute summer	Infiltration Tank	368	37.086	0.826	3.7	19.8333	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
360 minute summer	Pr S01	1.000	Pr S02	1.5	0.375	0.035	1.1149
360 minute summer	Pr S05	2.000	Pr S04	1.9	0.383	0.044	1.0913
360 minute summer	Pr S04	2.001	Pr S03	2.5	0.483	0.058	0.3098
360 minute summer	Pr S02	1.001	Pr S03	1.8	0.463	0.042	0.4723
360 minute summer	Pr S03	1.002	Pr S06	3.9	0.466	0.053	0.2939
360 minute summer	Pr S06	1.003	Infiltration Tank	3.7	0.629	0.093	0.4679
360 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 99.06%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
360 minute winter	Pr S01	360	37.203	0.453	1.1	0.6260	0.0000	SURCHARGED
360 minute winter	Pr S05	360	37.203	0.493	1.4	0.7060	0.0000	SURCHARGED
360 minute winter	Pr S04	360	37.203	0.676	2.2	1.2703	0.0000	SURCHARGED
360 minute winter	Pr S02	360	37.203	0.640	1.9	1.1778	0.0000	SURCHARGED
360 minute winter	Pr S03	360	37.203	0.728	3.0	0.8230	0.0000	SURCHARGED
360 minute winter	Pr S06	360	37.203	0.873	2.8	0.9870	0.0000	SURCHARGED
360 minute winter	Infiltration Tank	360	37.203	0.943	2.7	22.6251	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
360 minute winter	Pr S01	1.000	Pr S02	1.1	0.360	0.026	1.1149
360 minute winter	Pr S05	2.000	Pr S04	1.4	0.360	0.033	1.0913
360 minute winter	Pr S04	2.001	Pr S03	1.7	0.456	0.041	0.3098
360 minute winter	Pr S02	1.001	Pr S03	1.5	0.463	0.036	0.4723
360 minute winter	Pr S03	1.002	Pr S06	2.8	0.506	0.039	0.2939
360 minute winter	Pr S06	1.003	Infiltration Tank	2.7	0.532	0.068	0.4679
360 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 99.04%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute summer	Pr S01	488	37.145	0.395	1.2	0.5460	0.0000	SURCHARGED
480 minute summer	Pr S05	488	37.145	0.435	1.5	0.6231	0.0000	SURCHARGED
480 minute summer	Pr S04	488	37.145	0.618	2.4	1.1238	0.0000	SURCHARGED
480 minute summer	Pr S02	488	37.145	0.582	2.1	1.0308	0.0000	SURCHARGED
480 minute summer	Pr S03	488	37.145	0.670	3.3	0.7576	0.0000	SURCHARGED
480 minute summer	Pr S06	488	37.145	0.815	3.1	0.9216	0.0000	SURCHARGED
480 minute summer	Infiltration Tank	488	37.145	0.885	3.0	21.2373	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
480 minute summer	Pr S01	1.000	Pr S02	1.2	0.341	0.028	1.1149
480 minute summer	Pr S05	2.000	Pr S04	1.5	0.351	0.035	1.0913
480 minute summer	Pr S04	2.001	Pr S03	1.9	0.430	0.044	0.3098
480 minute summer	Pr S02	1.001	Pr S03	1.7	0.411	0.040	0.4723
480 minute summer	Pr S03	1.002	Pr S06	3.1	0.445	0.042	0.2939
480 minute summer	Pr S06	1.003	Infiltration Tank	3.0	0.601	0.074	0.4679
480 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 99.14%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
480 minute winter	Pr S01	480	37.266	0.516	0.9	0.7130	0.0000	SURCHARGED
480 minute winter	Pr S05	480	37.266	0.556	1.1	0.7961	0.0000	SURCHARGED
480 minute winter	Pr S04	480	37.266	0.739	1.8	1.4293	0.0000	SURCHARGED
480 minute winter	Pr S02	480	37.266	0.703	1.5	1.3385	0.0000	SURCHARGED
480 minute winter	Pr S03	480	37.266	0.791	2.4	0.8942	0.0000	SURCHARGED
480 minute winter	Pr S06	480	37.266	0.936	2.3	1.0582	0.0000	SURCHARGED
480 minute winter	Infiltration Tank	480	37.266	1.006	2.2	24.0120	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
480 minute winter	Pr S01	1.000	Pr S02	0.9	0.318	0.021	1.1149
480 minute winter	Pr S05	2.000	Pr S04	1.1	0.339	0.026	1.0913
480 minute winter	Pr S04	2.001	Pr S03	1.4	0.412	0.033	0.3098
480 minute winter	Pr S02	1.001	Pr S03	1.1	0.427	0.027	0.4723
480 minute winter	Pr S03	1.002	Pr S06	2.3	0.445	0.032	0.2939
480 minute winter	Pr S06	1.003	Infiltration Tank	2.2	0.513	0.056	0.4679
480 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 99.11%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute summer	Pr S01	615	37.186	0.436	1.0	0.6026	0.0000	SURCHARGED
600 minute summer	Pr S05	615	37.186	0.476	1.3	0.6817	0.0000	SURCHARGED
600 minute summer	Pr S04	615	37.186	0.659	2.1	1.2270	0.0000	SURCHARGED
600 minute summer	Pr S02	615	37.186	0.623	1.7	1.1350	0.0000	SURCHARGED
600 minute summer	Pr S03	615	37.186	0.711	2.8	0.8038	0.0000	SURCHARGED
600 minute summer	Pr S06	615	37.186	0.856	2.6	0.9678	0.0000	SURCHARGED
600 minute summer	Infiltration Tank	615	37.186	0.926	2.5	22.2167	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
600 minute summer	Pr S01	1.000	Pr S02	1.0	0.305	0.023	1.1149
600 minute summer	Pr S05	2.000	Pr S04	1.3	0.318	0.030	1.0913
600 minute summer	Pr S04	2.001	Pr S03	1.6	0.400	0.039	0.3098
600 minute summer	Pr S02	1.001	Pr S03	1.2	0.395	0.027	0.4723
600 minute summer	Pr S03	1.002	Pr S06	2.6	0.424	0.036	0.2939
600 minute summer	Pr S06	1.003	Infiltration Tank	2.5	0.449	0.063	0.4679
600 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 99.20%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
600 minute winter	Pr S01	600	37.425	0.675	0.8	0.9337	0.0000	SURCHARGED
600 minute winter	Pr S05	600	37.425	0.715	1.0	1.0248	0.0000	SURCHARGED
600 minute winter	Pr S04	600	37.425	0.898	1.5	1.8331	0.0000	SURCHARGED
600 minute winter	Pr S02	600	37.425	0.862	1.2	1.7450	0.0000	SURCHARGED
600 minute winter	Pr S03	600	37.425	0.950	2.0	1.0746	0.0000	SURCHARGED
600 minute winter	Pr S06	600	37.425	1.095	1.9	1.2386	0.0000	SURCHARGED
600 minute winter	Infiltration Tank	600	37.425	1.165	1.8	24.0120	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
600 minute winter	Pr S01	1.000	Pr S02	0.7	0.305	0.017	1.1149
600 minute winter	Pr S05	2.000	Pr S04	0.9	0.331	0.021	1.0913
600 minute winter	Pr S04	2.001	Pr S03	1.2	0.400	0.028	0.3098
600 minute winter	Pr S02	1.001	Pr S03	0.9	0.395	0.022	0.4723
600 minute winter	Pr S03	1.002	Pr S06	1.9	0.424	0.026	0.2939
600 minute winter	Pr S06	1.003	Infiltration Tank	1.8	0.551	0.046	0.4679
600 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 99.16%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute summer	Pr S01	735	37.214	0.464	0.9	0.6412	0.0000	SURCHARGED
720 minute summer	Pr S05	735	37.214	0.504	1.1	0.7217	0.0000	SURCHARGED
720 minute summer	Pr S04	735	37.214	0.687	1.6	1.2971	0.0000	SURCHARGED
720 minute summer	Pr S02	735	37.214	0.651	1.5	1.2057	0.0000	SURCHARGED
720 minute summer	Pr S03	735	37.214	0.739	2.3	0.8354	0.0000	SURCHARGED
720 minute summer	Pr S06	735	37.214	0.884	2.2	0.9994	0.0000	SURCHARGED
720 minute summer	Infiltration Tank	735	37.214	0.954	2.1	22.8873	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
720 minute summer	Pr S01	1.000	Pr S02	0.9	0.293	0.021	1.1149
720 minute summer	Pr S05	2.000	Pr S04	0.9	0.306	0.021	1.0913
720 minute summer	Pr S04	2.001	Pr S03	1.3	0.394	0.031	0.3098
720 minute summer	Pr S02	1.001	Pr S03	1.0	0.359	0.023	0.4723
720 minute summer	Pr S03	1.002	Pr S06	2.2	0.396	0.030	0.2939
720 minute summer	Pr S06	1.003	Infiltration Tank	2.1	0.449	0.053	0.4679
720 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 99.14%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
720 minute winter	Pr S01	705	37.565	0.815	0.7	1.1266	0.0000	SURCHARGED
720 minute winter	Pr S05	705	37.565	0.855	0.8	1.2246	0.0000	SURCHARGED
720 minute winter	Pr S04	705	37.565	1.038	1.3	2.1862	0.0000	SURCHARGED
720 minute winter	Pr S02	705	37.565	1.002	1.2	2.1005	0.0000	SURCHARGED
720 minute winter	Pr S03	705	37.565	1.090	1.8	1.2323	0.0000	SURCHARGED
720 minute winter	Pr S06	705	37.565	1.235	1.8	1.3963	0.0000	SURCHARGED
720 minute winter	Infiltration Tank	705	37.565	1.305	1.7	24.0120	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
720 minute winter	Pr S01	1.000	Pr S02	0.7	0.305	0.016	1.1149
720 minute winter	Pr S05	2.000	Pr S04	0.8	0.306	0.019	1.0913
720 minute winter	Pr S04	2.001	Pr S03	1.0	0.368	0.025	0.3098
720 minute winter	Pr S02	1.001	Pr S03	0.9	0.376	0.021	0.4723
720 minute winter	Pr S03	1.002	Pr S06	1.8	0.424	0.024	0.2939
720 minute winter	Pr S06	1.003	Infiltration Tank	1.7	0.495	0.043	0.4679
720 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 99.25%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute summer	Pr S01	960	37.368	0.618	0.8	0.8553	0.0000	SURCHARGED
960 minute summer	Pr S05	960	37.368	0.658	0.9	0.9435	0.0000	SURCHARGED
960 minute summer	Pr S04	960	37.368	0.841	1.3	1.6891	0.0000	SURCHARGED
960 minute summer	Pr S02	960	37.368	0.805	1.2	1.6008	0.0000	SURCHARGED
960 minute summer	Pr S03	960	37.368	0.893	1.9	1.0105	0.0000	SURCHARGED
960 minute summer	Pr S06	960	37.368	1.038	1.9	1.1745	0.0000	SURCHARGED
960 minute summer	Infiltration Tank	960	37.368	1.108	1.8	24.0120	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
960 minute summer	Pr S01	1.000	Pr S02	0.7	0.274	0.016	1.1149
960 minute summer	Pr S05	2.000	Pr S04	0.7	0.291	0.016	1.0913
960 minute summer	Pr S04	2.001	Pr S03	1.1	0.348	0.026	0.3098
960 minute summer	Pr S02	1.001	Pr S03	0.9	0.338	0.022	0.4723
960 minute summer	Pr S03	1.002	Pr S06	1.9	0.396	0.025	0.2939
960 minute summer	Pr S06	1.003	Infiltration Tank	1.8	0.493	0.044	0.4679
960 minute summer	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 98.88%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
960 minute winter	Pr S01	945	37.733	0.983	0.6	1.3593	0.0000	SURCHARGED
960 minute winter	Pr S05	945	37.733	1.023	0.7	1.4658	0.0000	SURCHARGED
960 minute winter	Pr S04	945	37.733	1.206	1.0	2.6112	0.0000	SURCHARGED
960 minute winter	Pr S02	945	37.733	1.170	0.9	2.5291	0.0000	SURCHARGED
960 minute winter	Pr S03	945	37.733	1.258	1.6	1.4226	0.0000	SURCHARGED
960 minute winter	Pr S06	945	37.733	1.403	1.5	1.5866	0.0000	SURCHARGED
960 minute winter	Infiltration Tank	945	37.733	1.473	1.5	24.0120	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
960 minute winter	Pr S01	1.000	Pr S02	0.5	0.266	0.012	1.1149
960 minute winter	Pr S05	2.000	Pr S04	0.6	0.291	0.015	1.0913
960 minute winter	Pr S04	2.001	Pr S03	0.9	0.353	0.021	0.3098
960 minute winter	Pr S02	1.001	Pr S03	0.7	0.356	0.017	0.4723
960 minute winter	Pr S03	1.002	Pr S06	1.5	0.396	0.021	0.2939
960 minute winter	Pr S06	1.003	Infiltration Tank	1.5	0.438	0.037	0.4679
960 minute winter	Infiltration Tank	Infiltration		0.2			

Results for 100 year +20% CC 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 99.33%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute summer	Pr S01	1410	37.437	0.687	0.6	0.9506	0.0000	SURCHARGED
1440 minute summer	Pr S05	1410	37.437	0.727	0.7	1.0422	0.0000	SURCHARGED
1440 minute summer	Pr S04	1410	37.437	0.910	1.0	1.8637	0.0000	SURCHARGED
1440 minute summer	Pr S02	1410	37.437	0.874	0.8	1.7754	0.0000	SURCHARGED
1440 minute summer	Pr S03	1410	37.437	0.962	1.5	1.0884	0.0000	SURCHARGED
1440 minute summer	Pr S06	1410	37.437	1.107	1.4	1.2524	0.0000	SURCHARGED
1440 minute summer	Infiltration Tank	1410	37.437	1.177	1.4	24.0120	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute summer	Pr S01	1.000	Pr S02	0.5	0.258	0.012	1.1149
1440 minute summer	Pr S05	2.000	Pr S04	0.6	0.258	0.014	1.0913
1440 minute summer	Pr S04	2.001	Pr S03	0.8	0.306	0.019	0.3098
1440 minute summer	Pr S02	1.001	Pr S03	0.7	0.311	0.016	0.4723
1440 minute summer	Pr S03	1.002	Pr S06	1.4	0.394	0.020	0.2939
1440 minute summer	Pr S06	1.003	Infiltration Tank	1.4	0.347	0.034	0.4679
1440 minute summer	Infiltration Tank	Infiltration		0.2			

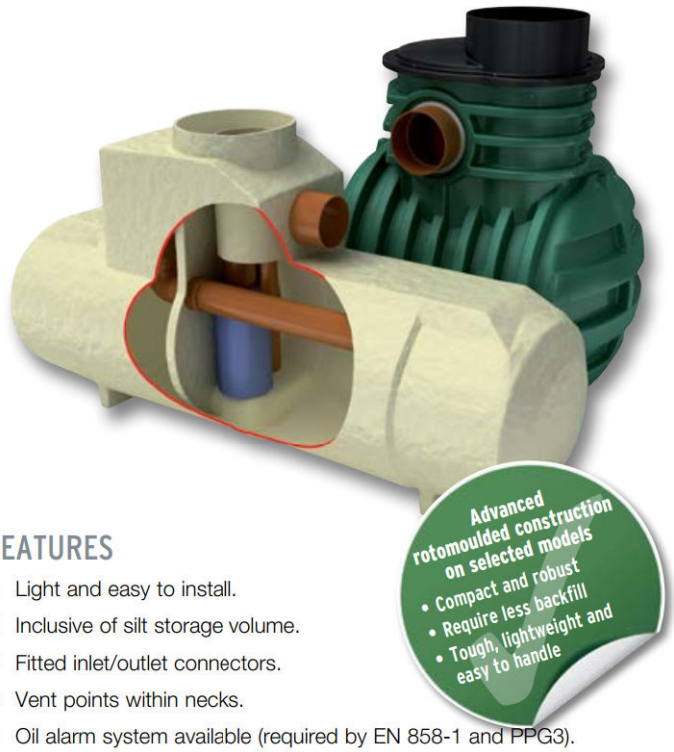
Results for 100 year +20% CC 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 98.48%

Node Event	US Node	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status
1440 minute winter	Pr S01	1380	38.070	1.320	0.4	1.8255	0.0000	FLOOD RISK
1440 minute winter	Pr S05	1380	38.070	1.360	0.5	1.9488	0.0000	FLOOD RISK
1440 minute winter	Pr S04	1380	38.070	1.543	0.7	3.4645	0.0000	FLOOD RISK
1440 minute winter	Pr S02	1380	38.070	1.507	0.6	3.3885	0.0000	FLOOD RISK
1440 minute winter	Pr S03	1380	38.070	1.595	1.2	1.8039	0.0000	FLOOD RISK
1440 minute winter	Pr S06	1380	38.070	1.740	1.2	1.9679	0.0000	FLOOD RISK
1440 minute winter	Infiltration Tank	1380	38.070	1.810	1.1	24.0120	0.0000	OK

Link Event	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)
1440 minute winter	Pr S01	1.000	Pr S02	0.4	0.235	0.009	1.1149
1440 minute winter	Pr S05	2.000	Pr S04	0.4	0.236	0.011	1.0913
1440 minute winter	Pr S04	2.001	Pr S03	0.6	0.306	0.015	0.3098
1440 minute winter	Pr S02	1.001	Pr S03	0.6	0.311	0.013	0.4723
1440 minute winter	Pr S03	1.002	Pr S06	1.2	0.396	0.016	0.2939
1440 minute winter	Pr S06	1.003	Infiltration Tank	1.1	0.368	0.028	0.4679
1440 minute winter	Infiltration Tank	Infiltration		0.2			

Appendix C TYPICAL PETROL INTERCEPTOR BROCHURE

Bypass NSB RANGE



APPLICATION

Bypass separators are used when it is considered an acceptable risk not to provide full treatment, for very high flows, and are used, for example, where the risk of a large spillage and heavy rainfall occurring at the same time is small, e.g.

- Surface car parks.
- Roadways.
- Lightly contaminated commercial areas.

PERFORMANCE

Klargester were one of the first UK manufacturers to have separators tested to EN 858-1. Klargester have now added the NSB bypass range to their portfolio of certified and tested models. The NSB number denotes the maximum flow at which the separator treats liquids. The British Standards Institute (BSI) tested the required range of Kingspan Klargester Bypass separators and certified their performance in relation to their flow and process performance assessing the effluent qualities to the requirements of EN 858-1. Klargester bypass separator designs follow the parameters determined during the testing of the required range of bypass separators.

Each bypass separator design includes the necessary volume requirements for:

- Oil separation capacity.
- Oil storage volume.
- Silt storage capacity.
- Coalescer.

The unit is designed to treat 10% of peak flow. The calculated drainage areas served by each separator are indicated according to the formula given by PPG3 NSB = 0.0018A(m2). Flows generated by higher rainfall rates will pass through part of the separator and bypass the main separation chamber.

Class I separators are designed to achieve a concentration of 5mg/litre of oil under standard test conditions.

FEATURES

- Light and easy to install.
- Inclusive of silt storage volume.
- Fitted inlet/outlet connectors.
- Vent points within necks.
- Oil alarm system available (required by EN 858-1 and PPG3).
- Extension access shafts for deep inverts.
- Maintenance from ground level.
- GRP or rotomoulded construction (subject to model).

To specify a nominal size bypass separator, the following information is needed:-

- The calculated flow rate for the drainage area served. Our designs are based on the assumption that any interconnecting pipework fitted elsewhere on site does not impede flow into or out of the separator and that the flow is not pumped.
- The drain invert inlet depth.
- Pipework type, size and orientation.

SIZES AND SPECIFICATIONS

UNIT NOMINAL SIZE	FLOW (l/s)	PEAK FLOW RATE (l/s)	DRAINAGE AREA (m²)	STORAGE CAPACITY (litres) SILT	OIL	UNIT LENGTH (mm)	UNIT DIA. (mm)	ACCESS SHAFT DIA. (mm)	BASE TO INLET INVERT (mm)	BASE TO OUTLET INVERT	STANDARD FALL ACROSS (mm)	MIN. INLET INVERT (mm)	STANDARD PIPEWORK DIA.
NSBP003	3	30	1670	300	45	1700	1350	600	1420	1320	100	500	160
NSBP004	4.5	45	2500	450	60	1700	1350	600	1420	1320	100	500	160
NSBP006	6	60	3335	600	90	1700	1350	600	1420	1320	100	500	160
NSBE010	10	100	5560	1000	150	2069	1220	750	1450	1350	100	700	315
NSBE015	15	150	8335	1500	225	2947	1220	750	1450	1350	100	700	315
NSBE020	20	200	11111	2000	300	3893	1220	750	1450	1350	100	700	375
NSBE025	25	250	13890	2500	375	3575	1420	750	1680	1580	100	700	375
NSBE030	30	300	16670	3000	450	4265	1420	750	1680	1580	100	700	450
NSBE040	40	400	22222	4000	600	3230	1920	600	2185	2035	150	1000	500
NSBE050	50	500	27778	5000	750	3960	1920	600	2185	2035	150	1000	600
NSBE075	75	750	41667	7500	1125	5841	1920	600	2235	2035	200	950	675
NSBE100	100	1000	55556	10000	1500	7661	1920	600	2235	2035	200	950	750
NSBE125	125	1250	69444	12500	1875	9548	1920	600	2235	2035	200	950	750

Rotomoulded chamber construction GRP chamber construction * Some units have more than one access shaft – diameter of largest shown.

Appendix D INFILTRATION TEST RESULTS

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

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Hazelhatch Road,
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Ground Investigations Ireland

Athenry Fire Station

Galway County Council

Ground Investigation Report

September 2021

GROUND INVESTIGATIONS IRELAND
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DOCUMENT CONTROL SHEET

Project Title	Athenry Fire Station
Engineer	Tobin
Client	Galway County Council
Project No	10595-04-21
Document Title	Ground Investigation Report

Rev.	Status	Author(s)	Reviewed By	Approved By	Office of Origin	Issue Date
A	Final	A. Mc Donnell	M. Sutton	F. Mc Namara	Dublin	23 September 2021

GROUND INVESTIGATIONS IRELAND
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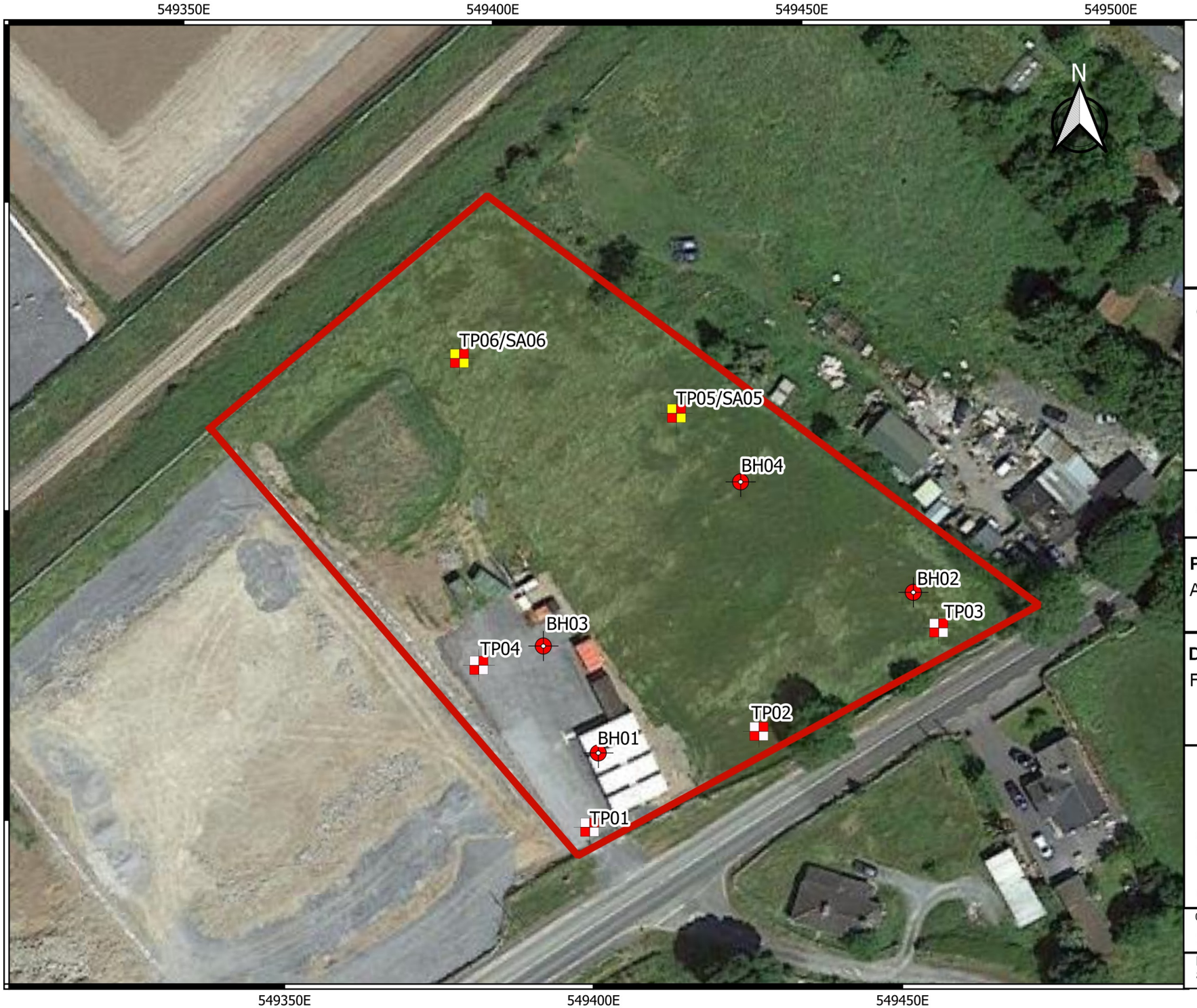
APPENDIX 1 - Site Location Plan



Indicative Site Boundary

Borehole

Trial Pit

Soak Away

Client:

TOBIN

Project Code:
10595-04-21

Project Title:
Athenry Fire Station

Drawing Title:
Figure 1 Site Location Map

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental
Ground Investigations Ireland Ltd.
Catherinstown House,
Hazelhatch Road,
Newcastle, Co. Dublin
www.gii.ie 01-6015175/5176

0 10 20 30 m

Drawn By:	Date:
SK	18/05/2021

APPENDIX 2 – Trial Pit Records

Ground Investigations Ireland Ltd
www.gii.ie

Site Athenry Fire Station, Athenry			**Trial Pit Number** TP01
Machine : 13T Tracked Excavator **Method :** Trial Pit	**Dimensions** 4.00m x 0.80m x 2.50m (L x W x D)	**Ground Level (mOD)** 37.54	**Client**	**Job Number** 10595-04-21
	Location 549402 E 727438.7 N	**Dates** 11/05/2021	**Engineer** Tobin Consulting Engineers	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.40)	Brown slightly sandy slightly gravelly TOPSOIL.		
				37.14	0.40			
0.50	B				(0.25)	MADE GROUND: Grey angular sandy fine to coarse Gravel (Crushed Rock Fill) with geotextile.		
				36.89	0.65			
					(0.15)	Possible Made Ground: Reddish brown gravelly very sandy Clay with sub-angular to sub-rounded cobbles.		
				36.74	0.80			
1.40	B					Firm gravelly slightly sandy SILT/CLAY		
					(1.70)			
2.10	B							
				35.04	2.50			
						Complete at 2.50m		

Plan

Remarks

Trial pit completed at 2.50m BGL due to rock or boulders
No groundwater encountered.
Trial pit stable.
Backfilled on completion.

Scale (approx)	Logged By	Figure No.
1:25	JS	10595-04-21.TP01

Ground Investigations Ireland Ltd
www.gii.ie

Site Athenry Fire Station, Athenry			**Trial Pit Number** TP02
Machine : 13T Tracked Excavator **Method :** Trial Pit	**Dimensions** 5.60m x 1.00m x 2.30m (L x W x D)	**Ground Level (mOD)** 37.85	**Client**	**Job Number** 10595-04-21
	Location 549431.1 E 727451.3 N	**Dates** 11/05/2021	**Engineer** Tobin Consulting Engineers	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly gravelly sandy TOPSOIL with rootlets.		
				37.55	0.30			
					(0.10)	Soft brown slightly sandy slightly gravelly CLAY.		
				37.45	0.40			
						Brownish grey slightly clayey gravelly fine to coarse SAND with occasional sub-angular to sub-rounded cobbles and occasional sub-rounded boulders.		
0.80	B				(1.00)			
				36.45	1.40			
						Brownish grey gravelly very clayey fine to coarse SAND with occasional sub-angular to sub-rounded cobbles and occasional sub-rounded boulders.		
1.60	B				(0.90)			
				35.55	2.30			
2.30	B					Complete at 2.30m		

Plan

Remarks

Trial pit completed at 2.30m BGL due to rock or boulders.
No groundwater encountered.
Trial pit stable.
Backfilled on completion.

Scale (approx)	Logged By	Figure No.
1:25	JS	10595-04-21.TP02

Ground Investigations Ireland Ltd
www.gii.ie

Site Athenry Fire Station, Athenry			**Trial Pit Number** TP03
Machine : 13T Tracked Excavator **Method :** Trial Pit	**Dimensions** 3.90m x 1.20m x 2.00m (L x W x D)	**Ground Level (mOD)** 38.28	**Client**	**Job Number** 10595-04-21
	Location 549461.9 E 727465 N	**Dates** 11/05/2021	**Engineer** Tobin Consulting Engineers	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly gravelly sandy TOPSOIL with rootlets and rare sub-rounded boulders.		
				37.98	0.30			
					(0.10)	Soft brown slightly sandy slightly gravelly SILT/CLAY.		
0.35	B			37.88	0.40	Brownish grey clayey sandy fine to coarse GRAVEL with occasional sub-angular to sub-rounded cobbles and occasional sub-rounded boulders.		
					(1.60)			
1.60	B							
				36.28	2.00	Complete at 2.00m		

Plan

Remarks

Trial pit completed at 2.00m BGL due to rock or boulders.
No groundwater encountered.
Trial pit stable.
Backfilled on completion.

Scale (approx)	Logged By	Figure No.
1:25	JS	10595-04-21.TP03

Ground Investigations Ireland Ltd
www.gii.ie

Site Athenry Fire Station, Athenry			**Trial Pit Number** TP04
Machine : 13T Tracked Excavator **Method :** Trial Pit	**Dimensions** 4.30m x 0.70m x 2.50m (L x W x D)	**Ground Level (mOD)** 37.88	**Client**	**Job Number** 10595-04-21
	Location 549386.8 E 727466.8 N	**Dates** 11/05/2021	**Engineer** Tobin Consulting Engineers	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.30)	Brown slightly gravelly sandy TOPSOIL with rootlets.		
				37.58	0.30			
					(0.20)	MADE GROUND: Grey angular sandy fine to coarse Gravel (Crushed Rock Fill) with geotextile.		
				37.38	0.50			
					(0.20)	Possible Made Ground: Reddish brown slightly gravelly slightly sandy Clay.		
0.60	B			37.18	0.70			
						Greyish brown slightly sandy clayey fine to coarse GRAVEL with occasional sub-angular to sub-rounded cobbles and occasional sub-rounded boulders.		
1.10	B				(1.10)			
				36.08	1.80			
						Firm slightly snady graevlly SILT/CLAY with occasional sub-angular to sub-rounded cobbles and occasional sub-rounded boulders.		
					(0.70)			
2.50	B			35.38	2.50			
						Complete at 2.50m		

Plan

Remarks

Trial pit completed at 2.50m BGL due to rock or boulders.
No groundwater encountered.
Trial pit stable.
Backfilled on completion.

Scale (approx)	Logged By	Figure No.
1:25	JS	10595-04-21.TP04

Ground Investigations Ireland Ltd
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Site Athenry Fire Station, Athenry			**Trial Pit Number** TP05/SA05
Machine : 13T Tracked Excavator **Method :** Trial Pit	**Dimensions** 1.70m x 1.00m x 2.50m (L x W x D)	**Ground Level (mOD)** 38.06	**Client**	**Job Number** 10595-04-21
	Location 549423 E 727504.2 N	**Dates** 11/05/2021	**Engineer** Tobin Consulting Engineers	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.45)	Brown slightly gravelly sandy TOPSOIL with rootlets, occasional sub-angular to sub-rounded cobbles and rare sub-rounded boulders.		
				37.61	0.45			
1.40	B				(1.95)	Soft light greyish brown sandy gravelly CLAY/SILT with occasional to many sub-angular to sub-rounded cobbles and rare sub-rounded boulders.		
2.40	B			35.66	2.40	Complete at 2.40m		

Plan

Remarks

Trial pit completed at 2.40m BGL.
No groundwater encountered.
Trial pit stable; slight side walls spalling.
Backfilled on completion.

Scale (approx)	Logged By	Figure No.
1:25	JS	

Ground Investigations Ireland Ltd
www.gii.ie

Site Athenry Fire Station, Athenry			**Trial Pit Number** TP06/SA06
Machine : 13T Tracked Excavator **Method :** Trial Pit	**Dimensions** 1.70m x 1.00m x 2.50m (L x W x D)	**Ground Level (mOD)** 39.83	**Client**	**Job Number** 10595-04-21
	Location 549388.8 E 727516.8 N	**Dates** 11/05/2021	**Engineer** Tobin Consulting Engineers	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.45)	Brown slightly gravelly sandy TOPSOIL with rootlets and rare sub-rounded boulders.		
				39.38	0.45			
0.60	B				(1.05)	Soft light grey slightly gravelly sandy CLAY with occasional sub-angular to sub-rounded cobbles and sub-rounded boulders.		
				38.33	1.50			
1.80	B				(1.00)	Soft to firm light grey lgravelly slightly sandy CLAY/SILT with occasional sub-angular to sub-rounded cobbles and sub-rounded boulders.		
				37.33	2.50			
2.50	B					Complete at 2.50m		

Plan

Remarks

Trial pit completed at 2.50m BGL.
No groundwater encountered.
Trial pit stable; slight side walls spalling.
Backfilled on completion.

Scale (approx)	Logged By	Figure No.
1:25	JS	

APPENDIX 4 – Soakaway Records

GROUND INVESTIGATIONS IRELAND
Geotechnical & Environmental

Catherinestown House,
Hazelhatch Road,
Newcastle,
Co. Dublin.
D22 YD52

Tel: 01 601 5175 / 5176
Email: info@gii.ie
Web: www.gii.ie

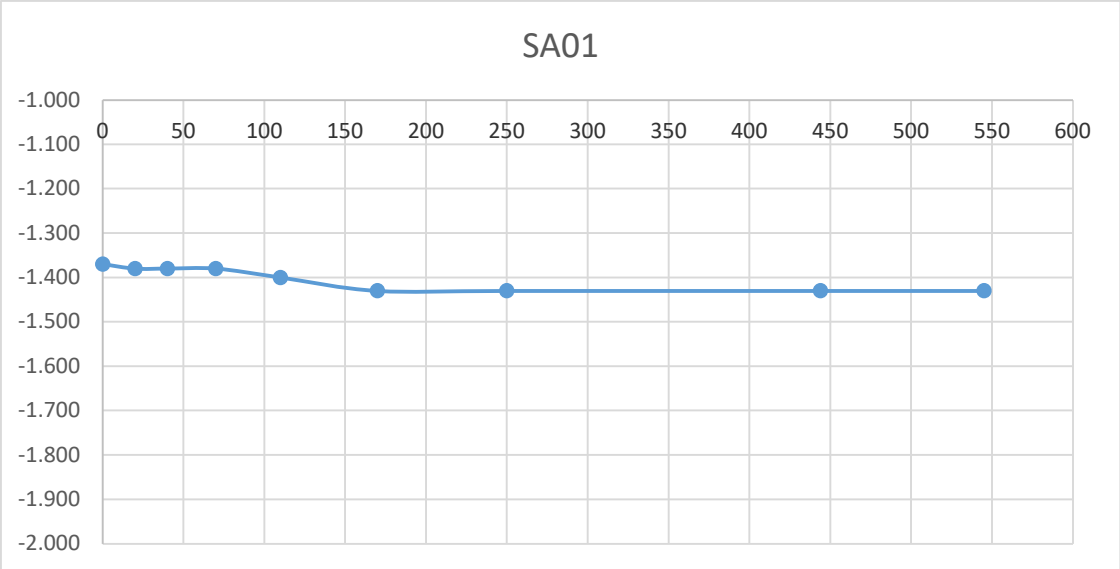
SA06

Soakaway Test to BRE Digest 365
Trial Pit Dimensions: 1.7m x 0.40m 2.0m (L x W x D)

Date	Time	Water level (m bgl)
14/09/2016	0	-1.370
14/09/2016	20	-1.380
14/09/2016	40	-1.380
14/09/2016	70	-1.380
14/09/2016	110	-1.400
14/09/2016	170	-1.430
14/09/2016	250	-1.430
14/09/2016	444	-1.430
14/09/2016	545	-1.430

***Soakaway failed - Pit backfilled**

Start depth	Depth of Pit	Diff	75% full	25%full
0.30	2.000	1.700	0.725	1.575



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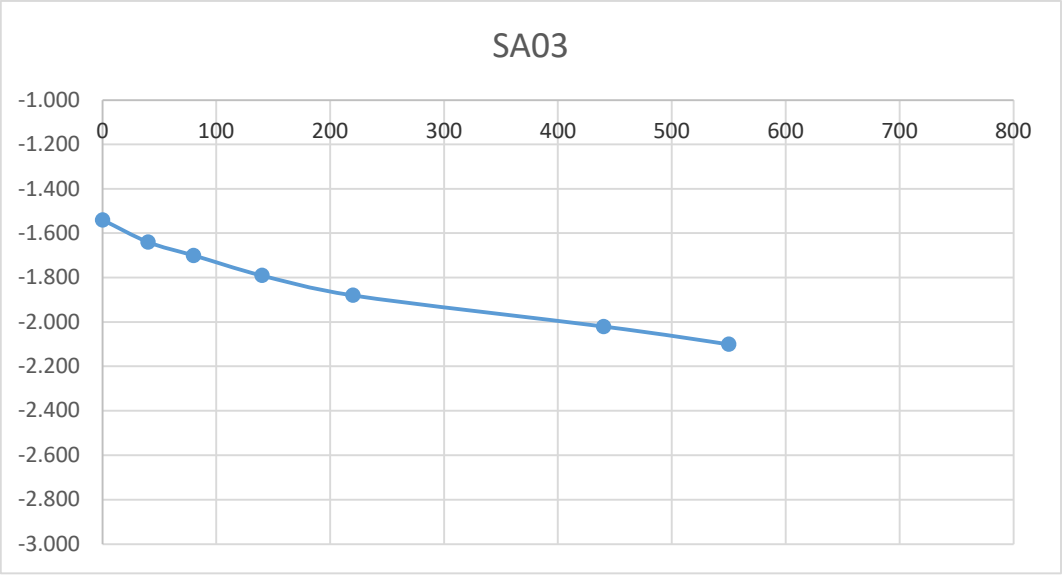
SA05

Soakaway Test to BRE Digest 365
Trial Pit Dimensions: 1.70m x 0.70m 2.40m (L x W x D)

Date	Time	Water level (m bgl)
11/05/2021	0	-1.540
11/05/2021	40	-1.640
11/05/2021	80	-1.700
11/05/2021	140	-1.790
11/05/2021	220	-1.880
11/05/2021	440	-2.020
11/05/2021	550	-2.100

Start depth	Depth of Pit		Diff	75% full	25%full
1.54	**2.400**		**0.860**	**1.755**	**2.185**
Length of pit (m)	Width of pit (m)			75-25Ht (m)	Vp75-25 (m3)
1.500	0.700			0.430	0.45
Tp75-25 (from graph) (s)		**36000**		50% Eff Depth	ap50 (m2)
				0.430	2.942
f =	**4.263E-06**	**m/s**			



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