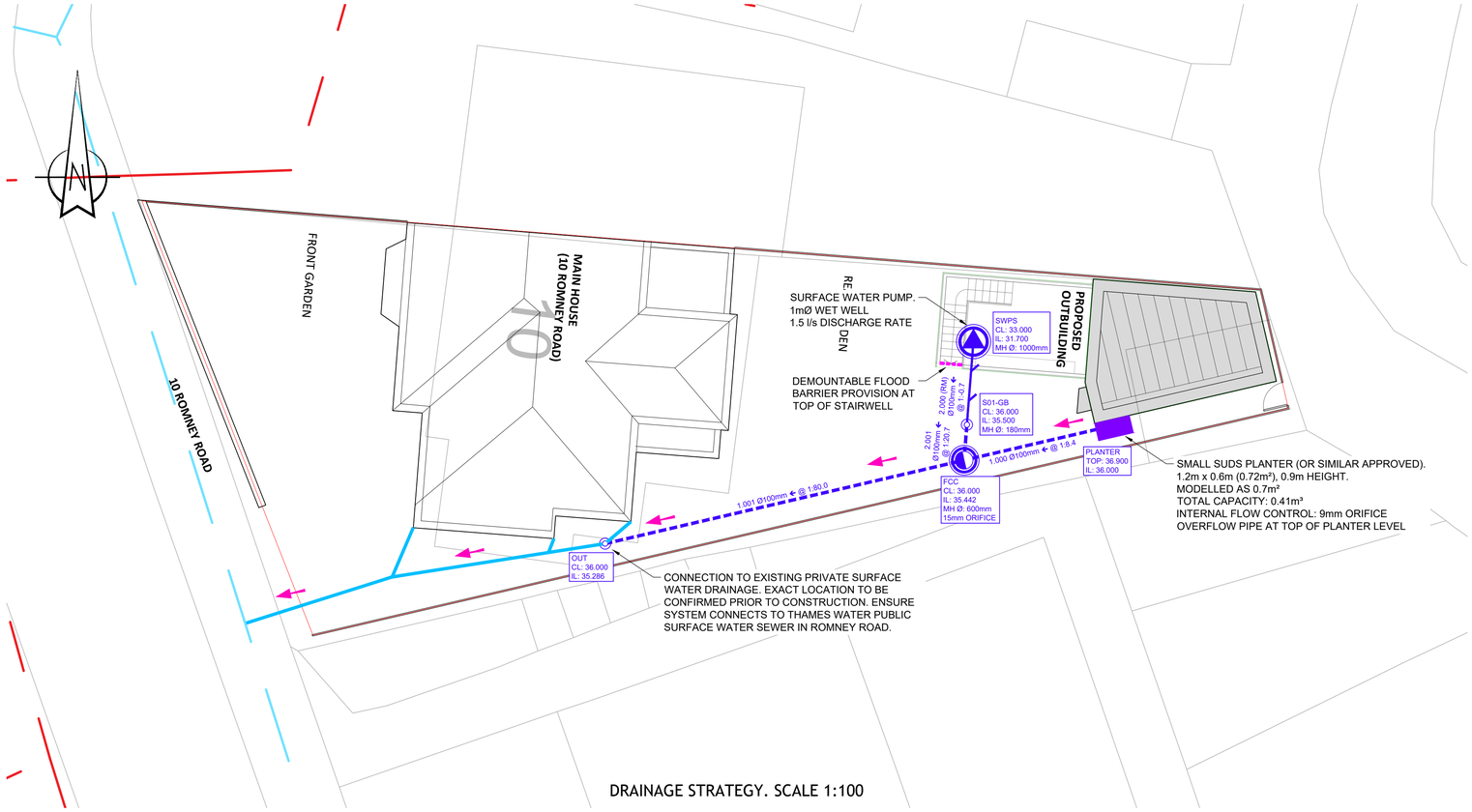


DRAINAGE STRATEGY. SCALE 1:100

REFER TO ATTACHED CALCULATIONS

Storm	GF	BF	Proposed	Betterment
Qbar	0.020	–	–	–
Q2	0.017	0.300	0.100	1%
Q10	0.032	0.700	0.200	1%
Q30	0.047	1.000	0.200	1%
Q100	0.062	1.200	0.200	1%
Q100+CC	–	–	0.300	1%

KEY
- SURFACE WATER DRAIN
- SURFACE WATER CHAMBER
- FLOW CONTROL CHAMBER
- SURFACE WATER PUMPING STATION
- SURFACE WATER RISING MAIN
- RAISED SUDS PLANTER
- DEMOUNTABLE FLOOD BARRIER
- EXISTING PRIVATE SURFACE WATER DRAIN
- EXISTING PUBLIC SURFACE WATER SEWER
- EXISTING PUBLIC FOUL WATER SEWER
- RISK OF FLOODING FROM SURFACE WATER: DATASET: rofsw_4band_0_2m_depth

FLOOD RISK ASSESSMENT

The site is located entirely in EA flood zone 1. There is no risk from fluvial or tidal sources.

Surface water flood risk is present within curtilage of property however this does not encroach on the proposed development. This can be seen in the lower viewport (left): *Risk of Surface Water Flooding*. However, while the flood risk outline does not affect the development, it is proposed to provide the means to attach a demountable flood barrier at the top of the stairs to the sunken courtyard.

The residents will sign up to the EA flood risk warning system, which will provide sufficient time to attach the flood barrier prior to any flood events affecting the area. https://www.gov.uk/sign-up-for-flood-warnings

As there is no construction within any flood area there is no displaced flood volume and any surface water flow paths will be retained.

PROPOSED DRAINAGE STRATEGY

Surface water runoff from the building will drain via a rainwater pipe into a raised planter. The planter will provide storage within a storage layer, the planting medium and the void at the top of the system. The total storage available is approximately 0.4 m^3. An integral flow control (a 9mm orifice) well allow the run off to attenuate within the planter before controlling the flow to the surface water system for the site.

Surface water runoff from the sunken courtyard will drain via a yard gully into a surface water pump station. The wet well will be a 1m diameter chamber and will pump up to a gravity brake chamber at 1.5l/s.

The two flows will join in a 600mm diameter chamber which will be fitted with a 15mm orifice on the outgoing pipe.

In this manner flows will be controlled from the development to rates considerably lower than the existing brownfield runoff rates. These rates and the resulting betterment are shown in the table above.

This controlled discharge will connect into the existing private surface water system within the property curtilage, prior to discharge into the Thames Water public surface water sewer.

In the event of pump failure there will be no flooding up to an including the 1 in 100 year event. During the 1 in 100 year plus climate change event, there will be 0.36m^3 flooding which during the critical storm occurs at 570 minutes (9.5 hours). The volume of flooding spread out over the sunken courtyard area of 14.5m^2 will result in a flood depth of just under 25mm. It is therefore recommended that there either be a threshold into the studio from the courtyard, or a fall of over 50mm from the studio door to the far side of the courtyard. This will ensure no ingress of flood water into the studio. It is also recommended that's a manual hand pump be kept on site which can be utilised in the event of pump failure if repair cannot be carried out with a nine under half hours of the start of the storm.

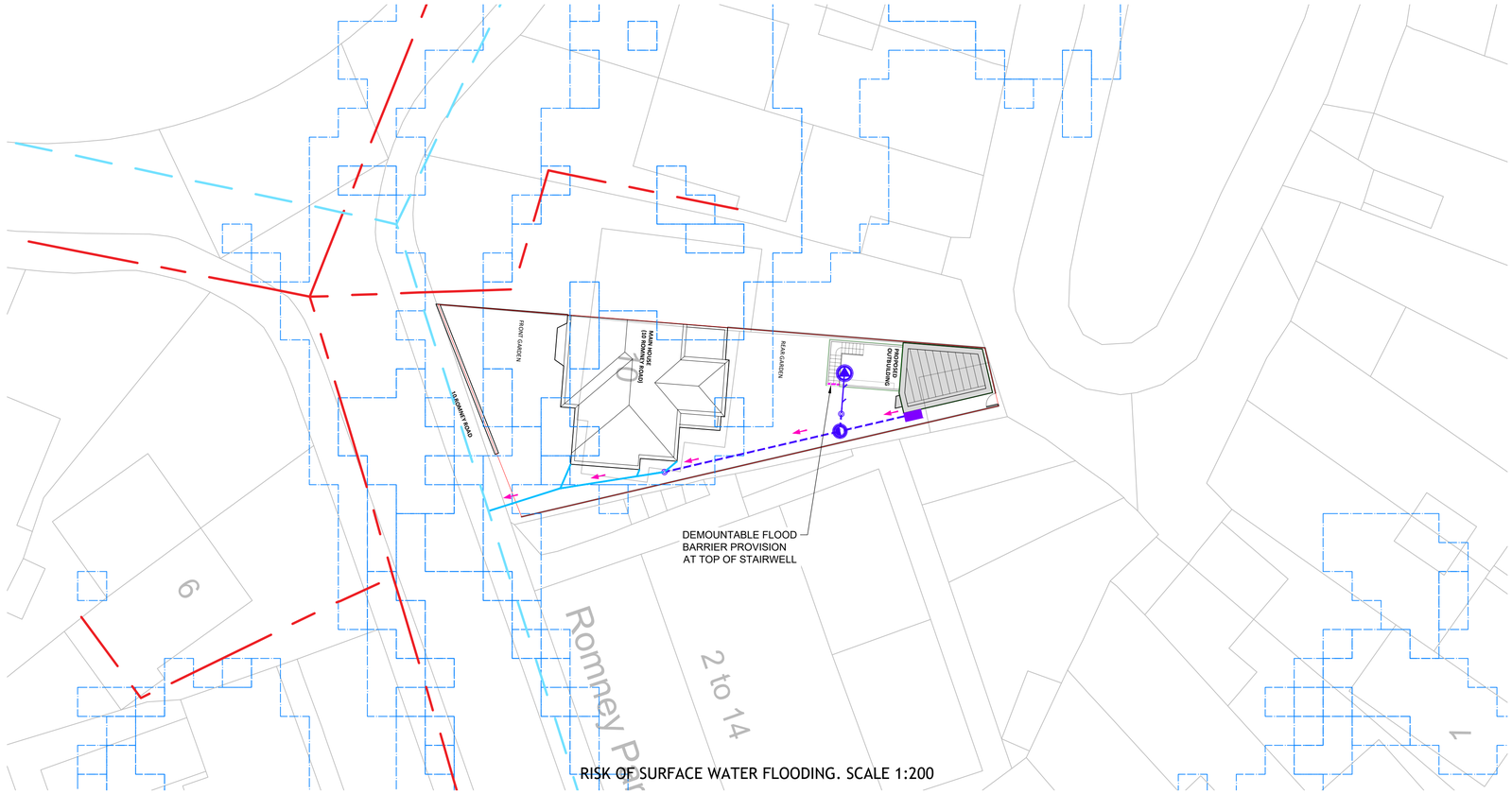
In an exceedance event (modelled as a 1 in 1000 year event), there is a combined 0.44m^3 flooding at the gravity break chamber and the flow control. Exceedance flows will mimic the existing drainage regime flowing over land until leaving the site. This will be no different, other than lower volumes, than is a 1 in 1000 year event were to occur now.

Calculations for the design have been undertaken in Causeway Flow, using FEH data. Storms have been modelled up to the 1 in 100 year event with a 40% allowance for climate change in line with the London Management Catchment.

SUMMARY

There is no flood risk the proposed development. There is a surface water flood risk channel within the curtilage of the building however this does not encroach upon the works. Nonetheless a flood barrier will be installed as a precautionary measure.

The development will be drained utilising SUdS where possible, in the form of a raised planter. Discharge rates from the site will be considerably lower than the existing brownfield rates.



RISK OF SURFACE WATER FLOODING. SCALE 1:200

ARTICLUS

Client Name: Mr Marcin Lesniak

Project Address: 10 Romney Road, Hayes, London, UB4 8PU

Section: Flood Risk and SuDS

Stage: Structural

Drawing Title: Surface Water Flood Risk Map

Drawing Status: For Approval

Revisions and Notes

Project No.	AR15712
Dwg No.	AR-STRU-1001
Revision	-
Scale at A1	AS SHOWN
Date	03-04-'25
Designed	MM
Checked	AC
Drawn	MM
Approved	AC

1:50 0 1000 2000

1:1 0 10 20 30 40 50

Design Settings

Rainfall Methodology	FEH-22	Minimum Velocity (m/s)	1.00
Return Period (years)	2	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	0.200
CV	0.750	Preferred Cover Depth (m)	1.200
Time of Entry (mins)	5.00	Include Intermediate Ground	✓
Maximum Time of Concentration (mins)	30.00	Enforce best practice design rules	x
Maximum Rainfall (mm/hr)	50.0		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
EX. SITE	0.002	5.00	36.000	1200	508684.633	183103.690	1.300
OUT			36.000	1200	508672.514	183100.873	1.456

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	EX. SITE	OUT	12.442	0.600	34.700	34.544	0.156	80.0	100	5.24	50.0

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	0.861	6.8	0.3	1.200	1.356	0.002	0.0	14	0.412

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	12.442	80.0	100	Circular	36.000	34.700	1.200	36.000	34.544	1.356

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	EX. SITE	1200	Manhole	Adoptable	OUT	1200	Manhole	Adoptable

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
EX. SITE	508684.633	183103.690	36.000	1.300	1200	 0	1.000	34.700	100
OUT	508672.514	183100.873	36.000	1.456	1200	1 	1.000	34.544	100

Simulation Settings

Rainfall Methodology	FEH-22	Skip Steady State	x	2 year (l/s)	4.3
Rainfall Events	Singular	Drain Down Time (mins)	240	10 year (l/s)	7.9
Summer CV	0.750	Additional Storage (m³/ha)	0.0	30 year (l/s)	11.7
Winter CV	1.000	Starting Level (m)		100 year (l/s)	15.5
Analysis Speed	Detailed	Check Discharge Rate(s)	✓	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 %)
2	0	0	0
10	0	0	0
30	0	0	0
100	0	0	0

Pre-development Discharge Rate

Site Makeup	Greenfield	Growth Factor 30 year	2.40
Greenfield Method	FEH	Growth Factor 100 year	3.19
Positively Drained Area (ha)	1.000	Betterment (%)	0
SAAR (mm)	630	QMed	4.3
Host	12	QBar	4.9
BFIHost	0.175	Q 2 year (l/s)	4.3
Region	6	Q 10 year (l/s)	7.9
QBar/QMed conversion factor	1.136	Q 30 year (l/s)	11.7
Growth Factor 2 year	0.88	Q 100 year (l/s)	15.5
Growth Factor 10 year	1.62		

Results for 2 year Critical Storm Duration. Lowest 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	EX. SITE	12	34.714	0.014	0.3	0.0164	0.0000	OK
15 minute winter	OUT	12	34.558	0.014	0.3	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX. SITE	1.000	OUT	0.3	0.432	0.044	0.0086	0.1

Results for 10 year Critical Storm Duration. Lowest 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	EX. SITE	11	34.722	0.022	0.7	0.0249	0.0000	OK
15 minute winter	OUT	11	34.566	0.022	0.7	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX. SITE	1.000	OUT	0.7	0.554	0.103	0.0157	0.3

Results for 30 year Critical Storm Duration. Lowest 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	EX. SITE	10	34.726	0.026	1.0	0.0294	0.0000	OK
15 minute winter	OUT	10	34.569	0.025	1.0	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX. SITE	1.000	OUT	1.0	0.604	0.142	0.0198	0.4

Results for 100 year Critical Storm Duration. Lowest 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	EX. SITE	11	34.729	0.029	1.2	0.0329	0.0000	OK
15 minute winter	OUT	11	34.573	0.029	1.2	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX. SITE	1.000	OUT	1.2	0.644	0.177	0.0232	0.6

Design Settings

Rainfall Methodology	FEH-22	Minimum Velocity (m/s)	1.00
Return Period (years)	2	Connection Type	Level Soffits
Additional Flow (%)	0	Minimum Backdrop Height (m)	0.200
CV	0.750	Preferred Cover Depth (m)	1.200
Time of Entry (mins)	5.00	Include Intermediate Ground	✓
Maximum Time of Concentration (mins)	30.00	Enforce best practice design rules	x
Maximum Rainfall (mm/hr)	50.0		

Nodes

Name	Area (ha)	T of E (mins)	Cover Level (m)	Diameter (mm)	Easting (m)	Northing (m)	Depth (m)
PLANTER	0.002	5.00	36.900		508689.179	183104.747	0.900
SWPS	0.002	5.00	33.000	1000	508684.950	183107.693	1.300
S01-GB			36.000	180	508684.728	183104.886	0.500
FCC			36.000	600	508684.633	183103.690	0.558
OUT			36.000		508672.514	183100.873	0.714

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	PLANTER	FCC	4.667	0.600	36.000	35.442	0.558	8.4	100	5.03	50.0
2.000	SWPS	S01-GB	2.816	0.600	31.700	35.500	-3.800	-0.7	63	5.05	50.0
2.001	S01-GB	FCC	1.200	0.600	35.500	35.442	0.058	20.7	100	5.06	50.0
1.001	FCC	OUT	12.442	0.600	35.442	35.286	0.156	80.0	100	5.30	50.0

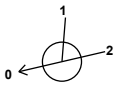
Name	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Σ Area (ha)	Σ Add Inflow (l/s)	Pro Depth (mm)	Pro Velocity (m/s)
1.000	2.689	21.1	0.3	0.800	0.458	0.002	0.0	9	0.985
2.000	1.000	3.1	0.2	1.237	0.437	0.002	0.0	63	0.000
2.001	1.705	13.4	0.2	0.400	0.458	0.002	0.0	9	0.622
1.001	0.861	6.8	0.5	0.458	0.614	0.004	0.0	19	0.511

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	4.667	8.4	100	Circular	36.900	36.000	0.800	36.000	35.442	0.458
2.000	2.816	-0.7	63	Circular	33.000	31.700	1.237	36.000	35.500	0.437
2.001	1.200	20.7	100	Circular	36.000	35.500	0.400	36.000	35.442	0.458
1.001	12.442	80.0	100	Circular	36.000	35.442	0.458	36.000	35.286	0.614

Link	US Node	Dia (mm)	Node Type	MH Type	DS Node	Dia (mm)	Node Type	MH Type
1.000	PLANTER		Junction		FCC	600	Manhole	Adoptable
2.000	SWPS	1000	Manhole	Adoptable	S01-GB	180	Manhole	Adoptable
2.001	S01-GB	180	Manhole	Adoptable	FCC	600	Manhole	Adoptable
1.001	FCC	600	Manhole	Adoptable	OUT		Junction	

Manhole Schedule

Node	Easting (m)	Northing (m)	CL (m)	Depth (m)	Dia (mm)	Connections	Link	IL (m)	Dia (mm)
PLANTER	508689.179	183104.747	36.900	0.900					
						0	1.000	36.000	100
SWPS	508684.950	183107.693	33.000	1.300	1000				
						0	2.000	31.700	63
S01-GB	508684.728	183104.886	36.000	0.500	180		1	2.000	35.500	63
							0	2.001	35.500	100
FCC	508684.633	183103.690	36.000	0.558	600		1	2.001	35.442	100
							2	1.000	35.442	100
							0	1.001	35.442	100
OUT	508672.514	183100.873	36.000	0.714			1	1.001	35.286	100

Simulation Settings

Rainfall Methodology	FEH-22	Skip Steady State	x	2 year (l/s)	4.3
Rainfall Events	Singular	Drain Down Time (mins)	240	30 year (l/s)	11.7
Summer CV	0.750	Additional Storage (m³/ha)	0.0	100 year (l/s)	15.5
Winter CV	1.000	Starting Level (m)		Check Discharge Volume	x
Analysis Speed	Detailed	Check Discharge Rate(s)	✓		

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 %)
2	0	0	0
10	0	0	0
30	0	0	0
100	0	0	0
100	40	0	0

Pre-development Discharge Rate

Site Makeup	Greenfield	Growth Factor 30 year	2.40
Greenfield Method	FEH	Growth Factor 100 year	3.19
Positively Drained Area (ha)	1.000	Betterment (%)	0
SAAR (mm)	630	QMed	4.3
Host	12	QBar	4.9
BFIHost	0.175	Q 2 year (l/s)	4.3
Region	6	Q 30 year (l/s)	11.7
QBar/QMed conversion factor	1.136	Q 100 year (l/s)	15.5
Growth Factor 2 year	0.88		

Node SWPS Online Pump Control

Flap Valve	x	Design Depth (m)	1.000	Switch off depth (m)	0.050
Replaces Downstream Link	✓	Design Flow (l/s)	1.5		
Invert Level (m)	31.700	Switch on depth (m)	0.100		

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.100	1.500	1.000	1.500

Node PLANTER Online Orifice Control

Flap Valve	x	Invert Level (m)	36.000	Discharge Coefficient	0.600
Replaces Downstream Link	x	Diameter (m)	0.009		

Node FCC Online Orifice Control

Flap Valve	x	Invert Level (m)	35.442	Discharge Coefficient	0.600
Replaces Downstream Link	x	Diameter (m)	0.015		

Node PLANTER Online Weir Control

Flap Valve	x	Invert Level (m)	36.890	Discharge Coefficient	0.590
Replaces Downstream Link	x	Width (m)	1.000		

Node PLANTER Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	36.750
Side Inf Coefficient (m/hr)	0.00000	Porosity	1.00	Time to half empty (mins)	

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.7	0.0	0.150	0.7	0.0	0.151	0.0	0.0

Node PLANTER Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	36.300
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.30	Time to half empty (mins)	39

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.7	0.0	0.450	0.7	0.0	0.451	0.0	0.0

Node PLANTER Depth/Area Storage Structure

Base Inf Coefficient (m/hr)	0.00000	Safety Factor	2.0	Invert Level (m)	36.000
Side Inf Coefficient (m/hr)	0.00000	Porosity	0.96	Time to half empty (mins)	33

Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)	Depth (m)	Area (m²)	Inf Area (m²)
0.000	0.7	0.0	0.300	0.7	0.0	0.301	0.0	0.0

Results for 2 year Critical Storm Duration. Lowest 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	PLANTER	160	36.200	0.200	0.1	0.1342	0.0000	SURCHARGED
180 minute winter	SWPS	100	31.800	0.100	0.1	0.0783	0.0000	SURCHARGED
240 minute winter	S01-GB	140	35.526	0.026	0.7	0.0006	0.0000	OK
240 minute winter	FCC	140	35.526	0.084	0.3	0.0239	0.0000	OK
240 minute winter	OUT	140	35.296	0.010	0.1	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	PLANTER	1.000	FCC	0.1	0.215	0.004	0.0167	
180 minute winter	SWPS	Pump	S01-GB	0.0				
240 minute winter	S01-GB	2.001	FCC	0.3	0.074	0.020	0.0052	
240 minute winter	FCC	1.001	OUT	0.1	0.336	0.019	0.0048	0.6

Results for 10 year Critical Storm Duration. Lowest 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	PLANTER	82	36.411	0.411	0.3	0.2253	0.0000	SURCHARGED
240 minute winter	SWPS	108	31.800	0.100	0.1	0.0783	0.0000	SURCHARGED
120 minute winter	S01-GB	92	35.602	0.102	1.6	0.0026	0.0000	SURCHARGED
120 minute winter	FCC	92	35.603	0.161	0.8	0.0455	0.0000	SURCHARGED
120 minute winter	OUT	92	35.297	0.011	0.2	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	PLANTER	1.000	FCC	0.1	0.359	0.005	0.0186	
240 minute winter	SWPS	Pump	S01-GB	1.5				
120 minute winter	S01-GB	2.001	FCC	-0.8	0.674	-0.060	0.0094	
120 minute winter	FCC	1.001	OUT	0.2	0.373	0.027	0.0060	1.2

Results for 30 year Critical Storm Duration. Lowest 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	PLANTER	86	36.595	0.595	0.4	0.2639	0.0000	SURCHARGED
60 minute summer	SWPS	34	31.800	0.100	0.4	0.0788	0.0000	SURCHARGED
180 minute winter	S01-GB	136	35.656	0.156	1.4	0.0039	0.0000	SURCHARGED
180 minute winter	FCC	136	35.656	0.214	1.1	0.0605	0.0000	SURCHARGED
180 minute winter	OUT	136	35.298	0.012	0.2	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	PLANTER	1.000	FCC	0.1	0.359	0.006	0.0187	
60 minute summer	SWPS	Pump	S01-GB	1.3				
180 minute winter	S01-GB	2.001	FCC	-1.0	-0.145	-0.076	0.0094	
180 minute winter	FCC	1.001	OUT	0.2	0.389	0.031	0.0067	1.8

Results for 100 year Critical Storm Duration. Lowest 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	PLANTER	90	36.790	0.790	0.5	0.3250	0.0000	FLOOD RISK
120 minute winter	SWPS	70	31.800	0.100	0.3	0.0786	0.0000	SURCHARGED
120 minute winter	S01-GB	106	35.727	0.227	1.4	0.0057	0.0000	FLOOD RISK
120 minute winter	FCC	106	35.729	0.287	1.5	0.0811	0.0000	FLOOD RISK
120 minute winter	OUT	108	35.299	0.013	0.2	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	PLANTER	1.000	FCC	0.1	0.359	0.007	0.0187	
120 minute winter	SWPS	Pump	S01-GB	1.4				
120 minute winter	S01-GB	2.001	FCC	1.4	0.731	0.103	0.0094	
120 minute winter	FCC	1.001	OUT	0.2	0.408	0.036	0.0074	2.3

Results for 100 year +40% CC Critical Storm Duration. Lowest 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	PLANTER	23	36.895	0.895	1.6	0.3985	0.0000	FLOOD RISK
60 minute winter	SWPS	25	31.800	0.100	0.7	0.0785	0.0000	SURCHARGED
120 minute winter	S01-GB	94	35.958	0.458	1.4	0.0114	0.0000	FLOOD RISK
120 minute winter	FCC	94	35.959	0.517	1.2	0.1463	0.0000	FLOOD RISK
120 minute winter	OUT	88	35.301	0.015	0.3	0.0000	0.0000	OK

Link Event (Upstream Depth)	US Node	Link	DS Node	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	PLANTER	1.000	FCC	0.8	0.409	0.037	0.0197	
60 minute winter	SWPS	Pump	S01-GB	1.4				
120 minute winter	S01-GB	2.001	FCC	1.1	0.752	0.081	0.0094	
120 minute winter	FCC	1.001	OUT	0.3	0.447	0.049	0.0092	3.1