APPENDIX C – Thames Water Sewer Records

Asset Location Search

MW ARCHITECTS
28Margaret Street
LONDON
W1W 8RZ

Search address supplied 123
Broadhurst Gardens
London
NW6 3BJ

Your reference 16009

Our reference ALS/ALS Standard/2016_3332613

Search date 20 May 2016

You are now able to order your Asset Location Search requests online by visiting
www.thameswater-propertysearches.co.uk

searchcode

Asset Location Search

Search address supplied: 123, Broadhurst Gardens, London, NW6 3BJ

Dear Sir / Madam

An Asset Location Search is recommended when undertaking a site development. It is essential to obtain information on the size and location of clean water and sewerage assets to safeguard against expensive damage and allow cost-effective service design.

The following records were searched in compiling this report: - the map of public sewers & the map of waterworks. Thames Water Utilities Ltd (TWUL) holds all of these.

This searchprovides maps showing the position, size of Thames Water assets close to the proposed development and also manhole cover and invert levels, where available.

Please note that none of the charges made for this report relate to the provision of Ordnance Survey mapping information. The replies contained in this letter are given following inspection of the public service records available to this company. No responsibility can be accepted for any error or omission in the replies.

You should be aware that the information contained on these plans is current only on the day that the plans are issued. The plans should only be used for the duration of the work that is being carried out at the present time. Under no circumstances should this data be copied or transmitted to parties other than those for whom the current work is being carried out.

Thames Water do update these service plans on a regular basis and failure to observe the above conditions could lead to damage arising to new or diverted services at a later date.

Contact Us

If you have any further queries regarding this enquiry please feel free to contact a member of the team on 0845 070 9148, or use the address below:

Thames Water Utilities Ltd
Property Searches
PO Box 3189
Slough
SL1 4WW

Email: searches@thameswater.co.uk
Web: www.thameswater-propertysearches.co.uk

Asset Location Search

Waste Water Services

Please provide a copy extract from the public sewer map.

Enclosed is a map showing the approximate lines of our sewers. Our plans do not show sewer connections from individual properties or any sewers not owned by Thames Water unless specifically annotated otherwise. Records such as "private" pipework are in some cases available from the Building Control Department of the relevant Local Authority.

Where the Local Authority does not hold such plans it might be advisable to consult the property deeds for the site or contact neighbouring landowners.

This report relates only to sewerage apparatus of Thames Water Utilities Ltd, it does not disclose details of cables and or communications equipment that may be running through or around such apparatus.

The sewer level information contained in this response represents all of the level data available in our existing records. Should you require any further Information, please refer to the relevant section within the 'Further Contacts' page found later in this document.

For your guidance:

- The Company is not generally responsible for rivers, watercourses, ponds, culverts or highway drains. If any of these are shown on the copy extract they are shown for information only.
- Any private sewers or lateral drains which are indicated on the extract of the public sewer map as being subject to an agreement under Section 104 of the Water Industry Act 1991 are not an ‘as constructed’ record. It is recommended these details be checked with the developer.

Clean Water Services

Please provide a copy extract from the public water main map.

Enclosed is a map showing the approximate positions of our water mains and associated apparatus. Please note that records are not kept of the positions of individual domestic supplies.

For your information, there will be a pressure of at least 10m head at the outside stop valve. If you would like to know the static pressure, please contact our Customer Centre on 0800 316 9800. The Customer Centre can also arrange for a full flow and

pressure test to be carried out for a fee.

For your guidance:

- Assets other than vested water mains may be shown on the plan, for information only.
- If an extract of the public water main record is enclosed, this will show known public water mains in the vicinity of the property. It should be possible to estimate the likely length and route of any private water supply pipe connecting the property to the public water network.

Payment for this Search

A charge will be added to your suppliers account.

Asset Location Search

Further contacts:

Waste Water queries

Should you require verification of the invert levels of public sewers, by site measurement, you will need to approach the relevant Thames Water Area Network Office for permission to lift the appropriate covers. This permission will usually involve you completing a TWOSA form. For further information please contact our Customer Centre on Tel: 0845 920 0800. Alternatively, a survey can be arranged, for a fee, through our Customer Centre on the above number.

If you have any questions regarding sewer connections, budget estimates, diversions, building over issues or any other questions regarding operational issues please direct them to our service desk. Which can be contacted by writing to:

Developer Services (Waste Water)
Thames Water
Clearwater Court
Vastern Road
Reading
RG1 8DB

Tel: 0845 850 2777
Email: developer.services@thameswater.co.uk

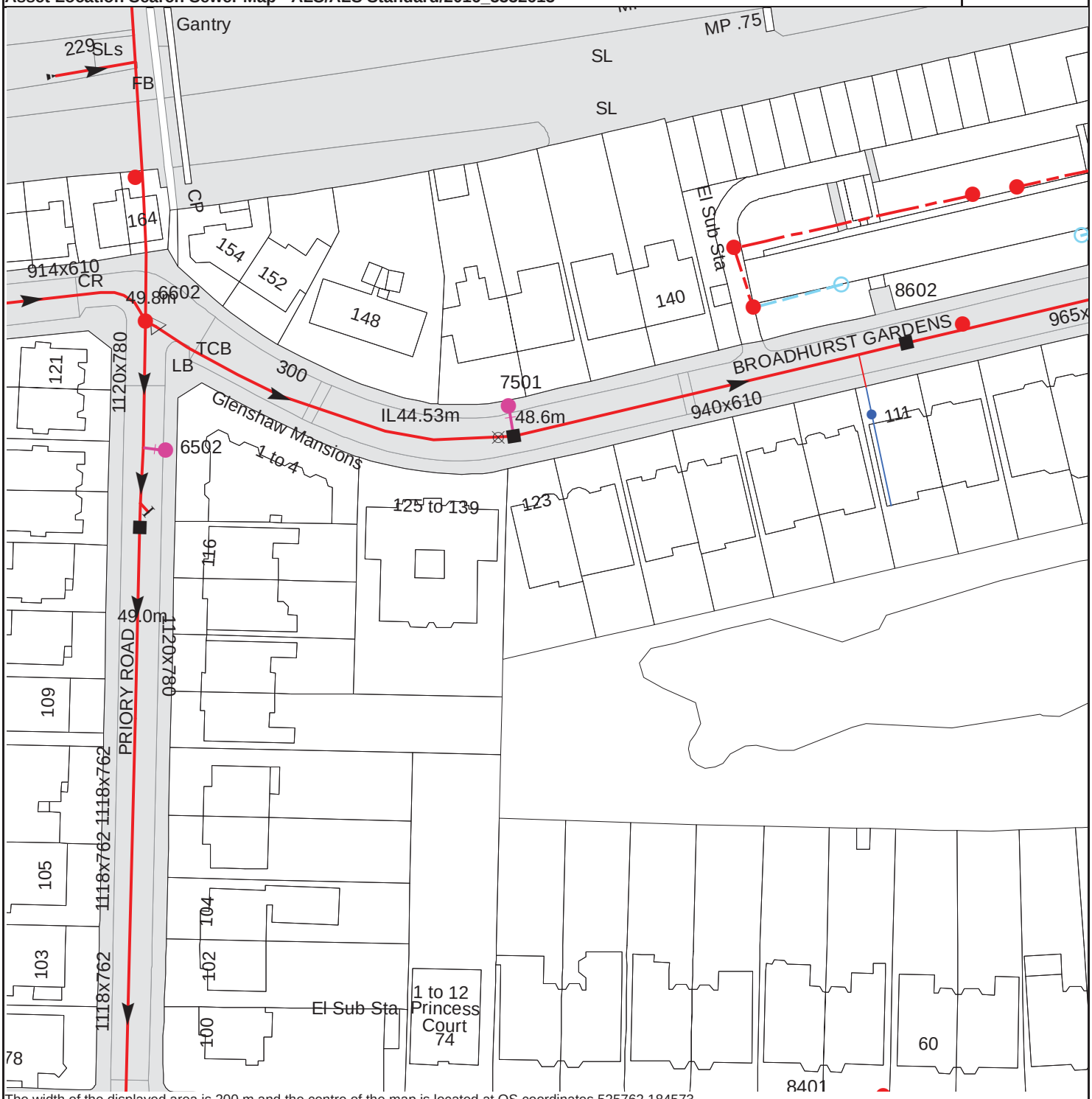
Clean Water queries

Should you require any advice concerning clean water operational issues or clean water connections, please contact:

Developer Services (Clean Water)
Thames Water
Clearwater Court
Vastern Road
Reading
RG1 8DB

Tel: 0845 850 2777
Email: developer.services@thameswater.co.uk

Asset Location Search Sewer Map - ALS/ALS Standard/2016_3332613



The width of the displayed area is 200 m and the centre of the map is located at OS coordinates 525762,184573

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

Based on the Ordnance Survey Map with the Sanction of the controller of H.M. Stationery Office, License no. 100019345 Crown Copyright Reserved.

NB. Levels quoted in metres Ordnance Newlyn Datum. The value -9999.00 indicates that no survey information is available

Manhole Reference	Manhole Cover Level	Manhole Invert Level
66CI	n/a	n/a
6602	49.87	45.06
76AB	n/a	n/a
76AC	n/a	n/a
86BD	n/a	n/a
8602	47.38	43.41
86BC	n/a	n/a
86BB	n/a	n/a
86BE	n/a	n/a
6502	n/a	n/a
851B	n/a	n/a
7501	n/a	n/a

The position of the apparatus shown on this plan is given without obligation and warranty, and the accuracy cannot be guaranteed. Service pipes are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Thames Water for any error or omission. The actual position of mains and services must be verified and established on site before any works are undertaken.

ALS Sewer Map Key

Public Sewer Types (Operated & Maintained by Thames Water)

Foul: A sewer designed to convey waste water from domestic and industrial sources to a treatment works.

Surface Water: A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.

Combined: A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.

Trunk Surface Water

Trunk Foul

Storm Relief

Trunk Combined

Vent Pipe

Bio-solids (Sludge)

Proposed Thames Surface Water Sewer

Proposed Thames Water Foul Sewer

Gallery

Foul Rising Main

Surface Water Rising Main

Combined Rising Main

Sludge Rising Main

Proposed Thames Water Rising Main

Vacuum

Sewer Fittings

A feature in a sewer that does not affect the flow in the pipe. Example: a vent is a fitting as the function of a vent is to release excess gas.

Air Valve

Dam Chase

Fitting

Meter

Vent Column

Operational Controls

A feature in a sewer that changes or diverts the flow in the sewer. Example: A hydrobrake limits the flow passing downstream.

Control Valve

Drop Pipe

Ancillary

Weir

End Items

End symbols appear at the start or end of a sewer pipe. Examples: an Undefined End at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of that symbol, Outfall on a surface water sewer indicates that the pipe discharges into a stream or river.

Outfall

Undefined End

Inlet

Other Symbols

Symbols used on maps which do not fall under other general categories

Public/Private Pumping Station

Change of characteristic indicator (C.O.C.I.)

Invert Level

Summit

Areas

Lines denoting areas of underground surveys, etc.

Agreement

Operational Site

Chamber

Tunnel

Conduit Bridge

Other Sewer Types (Not Operated or Maintained by Thames Water)

Foul Sewer

Surface Water Sewer

Combined Sewer

Gulley

Culverted Watercourse

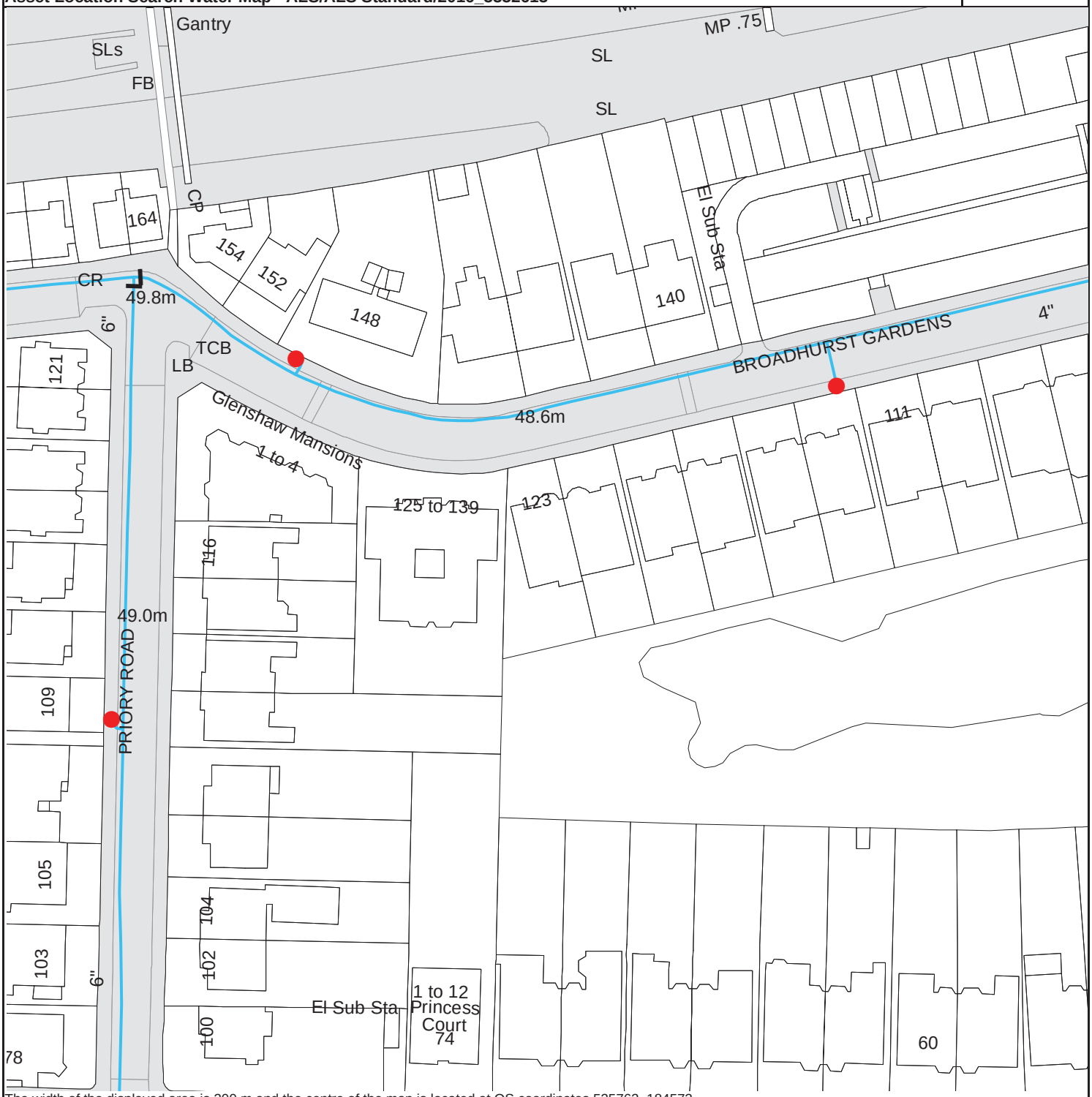
Proposed

Abandoned Sewer

Notes:

1) All levels associated with the plans are to Ordnance Datum Newlyn.
2) All measurements on the plans are metric.
3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate direction of flow.
4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.
5) 'na' or '0' on a manhole level indicates that data is unavailable.
6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in milimetres. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any text or symbology present on the plan, please contact a member of Property Insight on 0845 070 9148.

Asset Location Search Water Map - ALS/ALS Standard/2016_3332613



The width of the displayed area is 200 m and the centre of the map is located at OS coordinates 525762, 184573.

ALS Water Map Key

Water Pipes (Operated & Maintained by Thames Water)

4"

Distribution Main: The most common pipe shown on water maps. With few exceptions, domestic connections are only made to distribution mains.

16"

Trunk Main: A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers.

3" SUPPLY

Supply Main: A supply main indicates that the water main is used as a supply for a single property or group of properties.

3" FIRE

Fire Main: Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.

3" METERED

Metered Pipe: A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown.

Transmission Tunnel: A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided.

Proposed Main: A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main.

Valves

- General Purpose Valve
- Air Valve
- Pressure Control Valve
- Customer Valve

Hydrants

- Single Hydrant

Meters

- Meter

End Items

Symbol indicating what happens at the end of a water main.

- Blank Flange
- Capped End
- Emptying Pit
- Undefined End
- Manifold
- Customer Supply
- Fire Supply

Operational Sites

- Booster Station
- Other
- Other (Proposed)
- Pumping Station
- Service Reservoir
- Shaft Inspection
- Treatment Works
- Unknown
- Water Tower

Other Symbols

- Data Logger

PIPE DIAMETER	DEPTH BELOW GROUND
Up to 300mm (12")	900mm (3')
300mm - 600mm (12" - 24")	1100mm (3' 8")
600mm and bigger (24" plus)	1200mm (4')

Other Water Pipes (Not Operated or Maintained by Thames Water)

Other Water Company Main: Occasionally other water company water pipes may overlap the border of our clean water coverage area. These mains are denoted in purple and in most cases have the owner of the pipe displayed along them.

Private Main: Indiates that the water main in question is not owned by Thames Water. These mains normally have text associated with them indicating the diameter and owner of the pipe.

Terms and Conditions

All sales are made in accordance with Thames Water Utilities Limited (TWUL) standard terms and conditions unless previously agreed in writing.

1. All goods remain in the property of Thames Water Utilities Ltd until full payment is received.
2. Provision of service will be in accordance with all legal requirements and published TWUL policies.
3. All invoices are strictly due for payment 14 days from due date of the invoice. Any other terms must be accepted/agreed in writing prior to provision of goods or service, or will be held to be invalid.
4. Thames Water does not accept post-dated cheques-any cheques received will be processed for payment on date of receipt.
5. In case of dispute TWUL`s terms and conditions shall apply.
6. Penalty interest may be invoked by TWUL in the event of unjustifiable payment delay. Interest charges will be in line with UK Statute Law 'The Late Payment of Commercial Debts (Interest) Act 1998'.
7. Interest will be charged in line with current Court Interest Charges, if legal action is taken.
8. A charge may be made at the discretion of the company for increased administration costs.

A copy of Thames Water's standard terms and conditions are available from the Commercial Billing Team (cashoperations@thameswater.co.uk).

We publish several Codes of Practice including a guaranteed standards scheme. You can obtain copies of these leaflets by calling us on 0800 316 9800

If you are unhappy with our service you can speak to your original goods or customer service provider. If you are not satisfied with the response, your complaint will be reviewed by the Customer Services Director. You can write to him at: Thames Water Utilities Ltd. PO Box 492, Swindon, SN38 8TU.

If the Goods or Services covered by this invoice falls under the regulation of the 1991 Water Industry Act, and you remain dissatisfied you can refer your complaint to Consumer Council for Water on 0121 345 1000 or write to them at Consumer Council for Water, 1st Floor, Victoria Square House, Victoria Square, Birmingham, B2 4AJ.

Ways to pay your bill

Credit Card	**BACS Payment**	**Telephone Banking**	**Cheque**
Call **0845 070 9148** quoting your invoice number starting CBA or ADS.	Account number **90478703** Sort code **60-00-01** A remittance advice must be sent to: **Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW.** or email **ps.billing@thameswater.co.uk**	By calling your bank and quoting: Account number **90478703** Sort code **60-00-01** and your invoice number	Made payable to '**Thames Water Utilities Ltd**' Write your Thames Water account number on the back. Send to: **Thames Water Utilities Ltd., PO Box 3189, Slough SL1 4WW** or by DX to **151280 Slough 13**

Thames Water Utilities Ltd Registered in England & Wales No. 2366661 Registered Office Clearwater Court, Vastern Rd, Reading, Berks, RG1 8DB.

Search Code

IMPORTANT CONSUMER PROTECTION INFORMATION

This search has been produced by Thames Water Property Searches, Clearwater Court, Vastern Road, Reading RG1 8DB, which is registered with the Property Codes Compliance Board (PCCB) as a subscriber to the Search Code. The PCCB independently monitors how registered search firms maintain compliance with the Code.

The Search Code:

- provides protection for homebuyers, sellers, estate agents, conveyancers and mortgage lenders who rely on the information included in property search reports undertaken by subscribers on residential and commercial property within the United Kingdom
- sets out minimum standards which firms compiling and selling search reports have to meet
- promotes the best practise and quality standards within the industry for the benefit of consumers and property professionals
- enables consumers and property professionals to have confidence in firms which subscribe to the code, their products and services.

By giving you this information, the search firm is confirming that they keep to the principles of the Code. This provides important protection for you.

The Code's core principles

Firms which subscribe to the Search Code will:

- display the Search Code logo prominently on their search reports
- act with integrity and carry out work with due skill, care and diligence
- at all times maintain adequate and appropriate insurance to protect consumers
- conduct business in an honest, fair and professional manner
- handle complaints speedily and fairly
- ensure that products and services comply with industry registration rules and standards and relevant laws
- monitor their compliance with the Code

Complaints

If you have a query or complaint about your search, you should raise it directly with the search firm, and if appropriate ask for any complaint to be considered under their formal internal complaints procedure. If you remain dissatisfied with the firm's final response, after your complaint has been formally considered, or if the firm has exceeded the response timescales, you may refer your complaint for consideration under The Property Ombudsman scheme (TPOs). The Ombudsman can award compensation of up to £5,000 to you if he finds that you have suffered actual loss as a result of your search provider failing to keep to the Code.

Please note that all queries or complaints regarding your search should be directed to your search provider in the first instance, not to TPOs or to the PCCB.

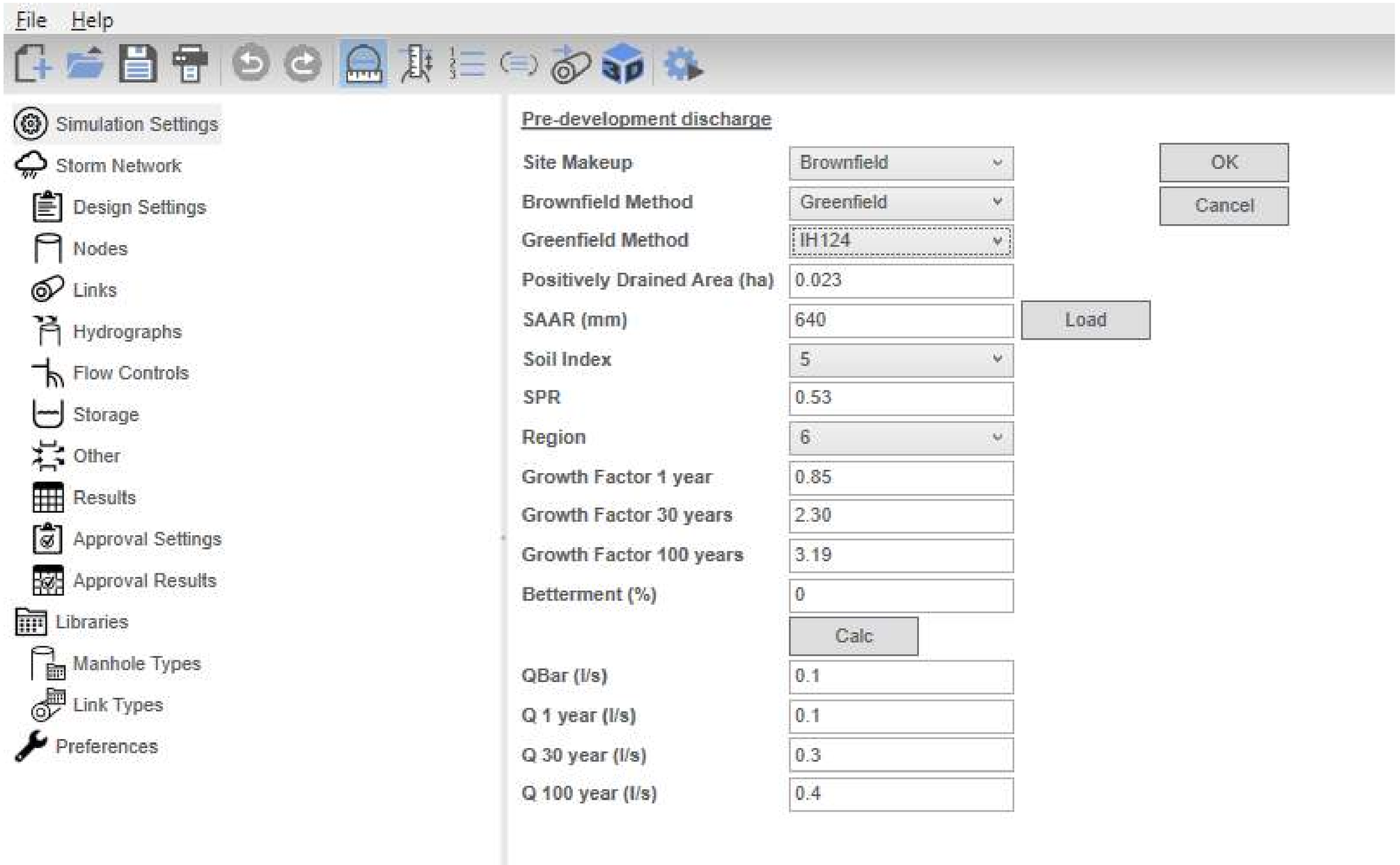
TPOs Contact Details

The Property Ombudsman scheme
Milford House
43-55 Milford Street
Salisbury
Wiltshire SP1 2BP
Tel: 01722 333306
Fax: 01722 332296
Email: admin@tpos.co.uk

You can get more information about the PCCB from www.propertycodes.org.uk

PLEASE ASK YOUR SEARCH PROVIDER IF YOU WOULD LIKE A COPY OF THE SEARCH CODE

APPENDIX D – Greenfield Run-off


File
Help
Simulation Settings
Storm Network
Design Settings
Nodes
Links
Hydrographs
Flow Controls
Storage
Other
Results
Approval Settings
Approval Results
Libraries
Manhole Types
Link Types
Preferences
Pre-development discharge
Site Makeup
Brownfield
Brownfield Method
Greenfield
Greenfield Method
IH124
Positively Drained Area (ha)
0.023
SAAR (mm)
640
Load
Soil Index
5
SPR
0.53
Region
6
Growth Factor 1 year
0.85
Growth Factor 30 years
2.30
Growth Factor 100 years
3.19
Betterment (%)
0
Calc
QBar (l/s)
0.1
Q 1 year (l/s)
0.1
Q 30 year (l/s)
0.3
Q 100 year (l/s)
0.4
OK
Cancel

APPENDIX E – Pre-Development Run-off

Drainage Design Report

Flow

v6.0

Network	Storm Network
Filename	Z:\Project\1149 - 123 Broadhurst Gardens, NW6\7. Simulation\Pre-Development Run-off\Report.pfd
Username	DESKTOP-G3F0B3Q\sanja
Last analysed	05/04/2018 12:39:00
Report produced on	05/04/2018 12:40:29

Causeway Sales

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Fax:	+44(0) 1628 552001
Email:	marketing@causeway.com
Web:	www.causeway.com

Technical support web portal:

http://support.causeway.com

Rainfall Methodology	FSR
Return Period (years)	1
Additional Flow (%)	0
FSR Region	England and Wales
M5-60 (mm)	20.000
Ratio-R	0.400
CV	0.750
Time of Entry (mins)	5.00
Maximum Time of Concentration (mins)	30.00
Maximum Rainfall (mm/hr)	20.0
Minimum Velocity (m/s)	1.00
Connection Type	Level Soffits
Minimum Backdrop Height (m)	0.200
Preferred Cover Depth (m)	1.200
Enforce best practice design rules	

	Name	Area (ha)	T of E (mins)	Add Inflow (l/s)	Cover Level (m)	Node Type	Manhole Type	Diameter (mm)	Width (mm)	Easting (m)	Northing (m)	Depth (m)	Notes
	EX.CWMH-01	0.023	5.00		5.000	Manhole	Adoptable	750	1000			1.000	
	OUTFALL				5.000	Manhole	Adoptable	1200				1.125	

	Name	US Node	DS Node	Length (m)	ks (mm) / n	Velocity Equation	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	Link Type	T of C (mins)	Rain (mm/hr)	Con Offset (m)	Min DS IL (m)
	Pipe 1	EX.CWMH-01	OUTFALL	10.000	0.600	Colebrook-White	4.000	3.875	0.125	80.0	150	Circular	5.15	20.0		

	Name	US Node	DS Node	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Minimum Depth (m)	Maximum Depth (m)	Σ Area (ha)	Σ Add Inflow (ha)	Pro Depth (mm)	Pro Velocity (m/s)	Notes
	Pipe 1	EX.CWMH-01	OUTFALL	1.125	19.9	1.2	0.850	0.975	0.850	0.975	0.023	0.0			

Rainfall Methodology	FSR		Return Period (years)	Climate Change (%)
FSR Region	England and Wales		1	0
M5-60 (mm)	20.000		30	0
Ratio-R	0.400		100	0
Summer CV	0.750			
Winter CV	0.840			
Analysis Speed	Detailed			
Drain Down Time (mins)	240			
Additional Storage (m³/ha)	20.0			
Storm Durations (mins)	15			
	30			
	60			
	120			
	180			
	240			
	360			
	480			
	600			
	720			
	960			
	1440			
	2160			
	2880			
	4320			
	5760			
	7200			
	8640			
	10080			
Check Discharge Rate(s)				
1 year (l/s)	0.1			
30 year (l/s)	0.3			
100 year (l/s)	0.4			

Check Discharge Volume				
100 year 15 minute (m³)	3			

Site Makeup	Brownfield
Brownfield Method	Greenfield
Greenfield Method	IH124
Positively Drained Area (ha)	0.023
SAAR (mm)	640
Soil Index	5
SPR	0.53
Region	6
Growth Factor 1 year	0.85
Growth Factor 30 years	2.30
Growth Factor 100 years	3.19
Betterment (%)	0
QBar	0.1
Q 1 year (l/s)	0.1
Q 30 year (l/s)	0.3
Q 100 year (l/s)	0.4

Site Makeup	Brownfield
Brownfield Method	Greenfield
Greenfield Method	FSR/FEH
Positively Drained Area (ha)	0.023
Soil Index	5
SPR	0.53
CWI	96.296
Return Period (years)	100
Climate Change (%)	0
Storm Duration (mins)	15
Betterment (%)	0
PR	0.458
Runoff Volume (m3)	3

Results for 1 year Critical Storm Duration. Lowest mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX.CWMH-01	10	4.042	0.042	3.2	0.0510	0.0000	OK	Pipe 1	OUTFALL	3.2	0.807	0.160	0.0394	1.5
15 minute winter	OUTFALL	10	3.916	0.041	3.2	0.0000	0.0000	OK							

Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX.CWMH-01	10	4.070	0.070	8.0	0.0850	0.0000	OK	Pipe 1	OUTFALL	7.9	1.021	0.398	0.0775	3.7
15 minute winter	OUTFALL	10	3.941	0.066	7.9	0.0000	0.0000	OK							

Results for 100 year Critical Storm Duration. Lowest mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX.CWMH-01	10	4.082	0.082	10.3	0.0993	0.0000	OK	Pipe 1	OUTFALL	10.2	1.085	0.513	0.0941	4.8
15 minute winter	OUTFALL	10	3.951	0.076	10.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	EX.CWMH-01	10	4.041	0.041	3.1	0.0500	0.0000	OK	Pipe 1	OUTFALL	3.1	0.797	0.154	0.0383	1.3
15 minute summer	OUTFALL	10	3.915	0.040	3.1	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX.CWMH-01	10	4.042	0.042	3.2	0.0510	0.0000	OK	Pipe 1	OUTFALL	3.2	0.807	0.160	0.0394	1.5
15 minute winter	OUTFALL	10	3.916	0.041	3.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	EX.CWMH-01	18	4.039	0.039	2.8	0.0477	0.0000	OK	Pipe 1	OUTFALL	2.8	0.780	0.141	0.0359	1.7
30 minute summer	OUTFALL	18	3.913	0.038	2.8	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	EX.CWMH-01	18	4.037	0.037	2.5	0.0449	0.0000	OK	Pipe 1	OUTFALL	2.5	0.756	0.126	0.0331	2.0
30 minute winter	OUTFALL	18	3.911	0.036	2.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	EX.CWMH-01	33	4.034	0.034	2.1	0.0410	0.0000	OK	Pipe 1	OUTFALL	2.1	0.720	0.106	0.0292	2.2
60 minute summer	OUTFALL	33	3.908	0.033	2.1	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	EX.CWMH-01	33	4.030	0.030	1.7	0.0368	0.0000	OK	Pipe 1	OUTFALL	1.7	0.679	0.086	0.0251	2.5
60 minute winter	OUTFALL	33	3.905	0.030	1.7	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	EX.CWMH-01	64	4.028	0.028	1.4	0.0334	0.0000	OK	Pipe 1	OUTFALL	1.4	0.642	0.070	0.0218	2.7
120 minute summer	OUTFALL	64	3.902	0.027	1.4	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	EX.CWMH-01	64	4.024	0.024	1.1	0.0296	0.0000	OK	Pipe 1	OUTFALL	1.1	0.599	0.055	0.0184	3.1
120 minute winter	OUTFALL	64	3.899	0.024	1.1	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	EX.CWMH-01	96	4.023	0.023	1.0	0.0282	0.0000	OK	Pipe 1	OUTFALL	1.0	0.583	0.050	0.0172	3.0
180 minute summer	OUTFALL	96	3.898	0.023	1.0	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	EX.CWMH-01	92	4.021	0.021	0.8	0.0253	0.0000	OK	Pipe 1	OUTFALL	0.8	0.546	0.040	0.0147	3.4
180 minute winter	OUTFALL	92	3.896	0.021	0.8	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	EX.CWMH-01	124	4.022	0.022	0.9	0.0267	0.0000	OK	Pipe 1	OUTFALL	0.9	0.563	0.045	0.0158	3.4
240 minute summer	OUTFALL	124	3.897	0.022	0.9	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	EX.CWMH-01	124	4.019	0.019	0.7	0.0236	0.0000	OK	Pipe 1	OUTFALL	0.7	0.522	0.035	0.0132	3.7
240 minute winter	OUTFALL	124	3.894	0.019	0.7	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	EX.CWMH-01	184	4.020	0.020	0.7	0.0236	0.0000	OK	Pipe 1	OUTFALL	0.7	0.524	0.035	0.0133	4.0
360 minute summer	OUTFALL	184	3.894	0.019	0.7	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	EX.CWMH-01	176	4.017	0.017	0.5	0.0202	0.0000	OK	Pipe 1	OUTFALL	0.5	0.475	0.025	0.0105	4.5
360 minute winter	OUTFALL	176	3.891	0.016	0.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	EX.CWMH-01	240	4.017	0.017	0.5	0.0202	0.0000	OK	Pipe 1	OUTFALL	0.5	0.475	0.025	0.0105	4.3
480 minute summer	OUTFALL	240	3.891	0.016	0.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	EX.CWMH-01	224	4.015	0.015	0.4	0.0181	0.0000	OK	Pipe 1	OUTFALL	0.4	0.444	0.020	0.0090	4.9
480 minute winter	OUTFALL	224	3.890	0.015	0.4	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	EX.CWMH-01	300	4.015	0.015	0.4	0.0181	0.0000	OK	Pipe 1	OUTFALL	0.4	0.444	0.020	0.0090	4.3
600 minute summer	OUTFALL	300	3.890	0.015	0.4	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	EX.CWMH-01	270	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	5.2
600 minute winter	OUTFALL	270	3.888	0.013	0.3	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	EX.CWMH-01	375	4.015	0.015	0.4	0.0181	0.0000	OK	Pipe 1	OUTFALL	0.4	0.444	0.020	0.0090	4.1
720 minute summer	OUTFALL	375	3.890	0.015	0.4	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	EX.CWMH-01	345	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	5.6
720 minute winter	OUTFALL	345	3.888	0.013	0.3	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	EX.CWMH-01	480	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	4.0
960 minute summer	OUTFALL	480	3.888	0.013	0.3	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	EX.CWMH-01	390	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	4.7
960 minute winter	OUTFALL	390	3.886	0.011	0.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	EX.CWMH-01	690	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	4.0
1440 minute summer	OUTFALL	690	3.886	0.011	0.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	EX.CWMH-01	690	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	5.1
1440 minute winter	OUTFALL	690	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 1 year 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute summer	EX.CWMH-01	1140	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	4.3
2160 minute summer	OUTFALL	1140	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 1 year 2160 minute winter. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute winter	EX.CWMH-01	780	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	5.1
2160 minute winter	OUTFALL	780	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 2880 minute summer. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2880 minute summer	EX.CWMH-01	1200	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	4.3
2880 minute summer	OUTFALL	1200	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 2880 minute winter. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2880 minute winter	EX.CWMH-01	1080	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	5.8
2880 minute winter	OUTFALL	1080	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 4320 minute summer. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
4320 minute summer	EX.CWMH-01	1860	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	5.1
4320 minute summer	OUTFALL	1860	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 4320 minute winter. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
4320 minute winter	EX.CWMH-01	1740	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	6.5
4320 minute winter	OUTFALL	1740	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 5760 minute summer. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
5760 minute summer	EX.CWMH-01	2580	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	5.1
5760 minute summer	OUTFALL	2580	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 5760 minute winter. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
5760 minute winter	EX.CWMH-01	2460	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	6.5
5760 minute winter	OUTFALL	2460	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 7200 minute summer. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
7200 minute summer	EX.CWMH-01	3360	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	4.3
7200 minute summer	OUTFALL	3360	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 7200 minute winter. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
7200 minute winter	EX.CWMH-01	3360	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	4.3
7200 minute winter	OUTFALL	3360	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 8640 minute summer. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
8640 minute summer	EX.CWMH-01	4080	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	4.3
8640 minute summer	OUTFALL	4080	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 8640 minute winter. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
8640 minute winter	EX.CWMH-01	60	4.000	0.000	0.0	0.0000	0.0000	OK	Pipe 1	OUTFALL	0.0	0.000	0.000	0.0000	0.0
8640 minute winter	OUTFALL	60	3.875	0.000	0.0	0.0000	0.0000	OK							

Results for 1 year 10080 minute summer. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
10080 minute summer	EX.CWMH-01	4860	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	3.6
10080 minute summer	OUTFALL	4860	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 10080 minute winter. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
10080 minute winter	EX.CWMH-01	60	4.000	0.000	0.0	0.0000	0.0000	OK	Pipe 1	OUTFALL	0.0	0.000	0.000	0.0000	0.0
10080 minute winter	OUTFALL	60	3.875	0.000	0.0	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	EX.CWMH-01	10	4.068	0.068	7.6	0.0825	0.0000	OK	Pipe 1	OUTFALL	7.5	1.009	0.379	0.0746	3.3
15 minute summer	OUTFALL	10	3.939	0.064	7.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX.CWMH-01	10	4.070	0.070	8.0	0.0850	0.0000	OK	Pipe 1	OUTFALL	7.9	1.021	0.398	0.0775	3.7
15 minute winter	OUTFALL	10	3.941	0.066	7.9	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	EX.CWMH-01	18	4.064	0.064	6.8	0.0775	0.0000	OK	Pipe 1	OUTFALL	6.8	0.986	0.342	0.0690	4.3
30 minute summer	OUTFALL	18	3.935	0.060	6.8	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	EX.CWMH-01	18	4.060	0.060	6.1	0.0728	0.0000	OK	Pipe 1	OUTFALL	6.1	0.959	0.307	0.0636	4.8
30 minute winter	OUTFALL	18	3.932	0.057	6.1	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	EX.CWMH-01	33	4.054	0.054	5.0	0.0651	0.0000	OK	Pipe 1	OUTFALL	5.0	0.911	0.252	0.0549	5.3
60 minute summer	OUTFALL	33	3.926	0.051	5.0	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	EX.CWMH-01	33	4.048	0.048	4.1	0.0584	0.0000	OK	Pipe 1	OUTFALL	4.1	0.864	0.206	0.0474	5.9
60 minute winter	OUTFALL	33	3.921	0.046	4.1	0.0000	0.0000	OK							

Results for 30 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	EX.CWMH-01	64	4.042	0.042	3.2	0.0511	0.0000	OK	Pipe 1	OUTFALL	3.2	0.809	0.161	0.0396	6.4
120 minute summer	OUTFALL	64	3.916	0.041	3.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	EX.CWMH-01	64	4.037	0.037	2.5	0.0449	0.0000	OK	Pipe 1	OUTFALL	2.5	0.756	0.126	0.0331	7.2
120 minute winter	OUTFALL	64	3.911	0.036	2.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	EX.CWMH-01	96	4.036	0.036	2.4	0.0440	0.0000	OK	Pipe 1	OUTFALL	2.4	0.747	0.121	0.0321	7.0
180 minute summer	OUTFALL	96	3.910	0.035	2.4	0.0000	0.0000	OK							

Results for 30 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	EX.CWMH-01	92	4.031	0.031	1.8	0.0379	0.0000	OK	Pipe 1	OUTFALL	1.8	0.690	0.091	0.0261	7.8
180 minute winter	OUTFALL	92	3.905	0.030	1.8	0.0000	0.0000	OK							

Results for 30 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	EX.CWMH-01	124	4.033	0.033	2.0	0.0400	0.0000	OK	Pipe 1	OUTFALL	2.0	0.710	0.100	0.0281	7.6
240 minute summer	OUTFALL	124	3.907	0.032	2.0	0.0000	0.0000	OK							

Results for 30 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	EX.CWMH-01	124	4.029	0.029	1.5	0.0346	0.0000	OK	Pipe 1	OUTFALL	1.5	0.655	0.075	0.0229	8.6
240 minute winter	OUTFALL	124	3.903	0.028	1.5	0.0000	0.0000	OK							

Results for 30 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	EX.CWMH-01	184	4.029	0.029	1.5	0.0345	0.0000	OK	Pipe 1	OUTFALL	1.5	0.653	0.075	0.0229	8.2
360 minute summer	OUTFALL	184	3.903	0.028	1.5	0.0000	0.0000	OK							

Results for 30 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	EX.CWMH-01	184	4.024	0.024	1.1	0.0296	0.0000	OK	Pipe 1	OUTFALL	1.1	0.599	0.055	0.0184	9.3
360 minute winter	OUTFALL	184	3.899	0.024	1.1	0.0000	0.0000	OK							

Results for 30 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	EX.CWMH-01	248	4.026	0.026	1.2	0.0309	0.0000	OK	Pipe 1	OUTFALL	1.2	0.614	0.060	0.0196	8.6
480 minute summer	OUTFALL	248	3.900	0.025	1.2	0.0000	0.0000	OK							

Results for 30 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	EX.CWMH-01	248	4.022	0.022	0.9	0.0268	0.0000	OK	Pipe 1	OUTFALL	0.9	0.565	0.045	0.0159	10.2
480 minute winter	OUTFALL	248	3.897	0.022	0.9	0.0000	0.0000	OK							

Results for 30 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	EX.CWMH-01	315	4.022	0.022	0.9	0.0268	0.0000	OK	Pipe 1	OUTFALL	0.9	0.565	0.045	0.0159	9.3
600 minute summer	OUTFALL	315	3.897	0.022	0.9	0.0000	0.0000	OK							

Results for 30 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	EX.CWMH-01	300	4.020	0.020	0.7	0.0237	0.0000	OK	Pipe 1	OUTFALL	0.7	0.525	0.035	0.0133	10.1
600 minute winter	OUTFALL	300	3.894	0.019	0.7	0.0000	0.0000	OK							

Results for 30 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	EX.CWMH-01	375	4.021	0.021	0.8	0.0253	0.0000	OK	Pipe 1	OUTFALL	0.8	0.546	0.040	0.0147	9.8
720 minute summer	OUTFALL	375	3.896	0.021	0.8	0.0000	0.0000	OK							

Results for 30 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	EX.CWMH-01	345	4.018	0.018	0.6	0.0220	0.0000	OK	Pipe 1	OUTFALL	0.6	0.501	0.030	0.0120	10.6
720 minute winter	OUTFALL	345	3.893	0.018	0.6	0.0000	0.0000	OK							

Results for 30 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	EX.CWMH-01	495	4.020	0.020	0.7	0.0237	0.0000	OK	Pipe 1	OUTFALL	0.7	0.525	0.035	0.0133	11.1
960 minute summer	OUTFALL	495	3.894	0.019	0.7	0.0000	0.0000	OK							

Results for 30 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	EX.CWMH-01	450	4.017	0.017	0.5	0.0202	0.0000	OK	Pipe 1	OUTFALL	0.5	0.475	0.025	0.0105	11.7
960 minute winter	OUTFALL	450	3.891	0.016	0.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	EX.CWMH-01	750	4.017	0.017	0.5	0.0202	0.0000	OK	Pipe 1	OUTFALL	0.5	0.475	0.025	0.0105	11.2
1440 minute summer	OUTFALL	750	3.891	0.016	0.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	EX.CWMH-01	720	4.015	0.015	0.4	0.0181	0.0000	OK	Pipe 1	OUTFALL	0.4	0.444	0.020	0.0090	13.7
1440 minute winter	OUTFALL	720	3.890	0.015	0.4	0.0000	0.0000	OK							

Results for 30 year 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute summer	EX.CWMH-01	1080	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	10.8
2160 minute summer	OUTFALL	1080	3.888	0.013	0.3	0.0000	0.0000	OK							

Results for 30 year 2160 minute winter. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute winter	EX.CWMH-01	1140	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	12.3
2160 minute winter	OUTFALL	1140	3.888	0.013	0.3	0.0000	0.0000	OK							

Results for 30 year 2880 minute summer. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2880 minute summer	EX.CWMH-01	1500	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	10.8
2880 minute summer	OUTFALL	1500	3.888	0.013	0.3	0.0000	0.0000	OK							

Results for 30 year 2880 minute winter. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2880 minute winter	EX.CWMH-01	1260	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	12.3
2880 minute winter	OUTFALL	1260	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 30 year 4320 minute summer. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
4320 minute summer	EX.CWMH-01	2100	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	10.1
4320 minute summer	OUTFALL	2100	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 30 year 4320 minute winter. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
4320 minute winter	EX.CWMH-01	2160	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	13.0
4320 minute winter	OUTFALL	2160	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 30 year 5760 minute summer. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
5760 minute summer	EX.CWMH-01	2880	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	10.8
5760 minute summer	OUTFALL	2880	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 30 year 5760 minute winter. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
5760 minute winter	EX.CWMH-01	1920	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	13.0
5760 minute winter	OUTFALL	1920	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 30 year 7200 minute summer. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
7200 minute summer	EX.CWMH-01	2880	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	10.1
7200 minute summer	OUTFALL	2880	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 30 year 7200 minute winter. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
7200 minute winter	EX.CWMH-01	2580	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	13.7
7200 minute winter	OUTFALL	2580	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 30 year 8640 minute summer. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
8640 minute summer	EX.CWMH-01	3540	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	10.8
8640 minute summer	OUTFALL	3540	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 30 year 8640 minute winter. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
8640 minute winter	EX.CWMH-01	3240	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	14.4
8640 minute winter	OUTFALL	3240	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 30 year 10080 minute summer. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
10080 minute summer	EX.CWMH-01	4260	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	10.8
10080 minute summer	OUTFALL	4260	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 30 year 10080 minute winter. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
10080 minute winter	EX.CWMH-01	3960	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	14.4
10080 minute winter	OUTFALL	3960	3.883	0.008	0.1	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	EX.CWMH-01	10	4.080	0.080	9.8	0.0963	0.0000	OK	Pipe 1	OUTFALL	9.7	1.073	0.490	0.0907	4.3
15 minute summer	OUTFALL	10	3.949	0.074	9.7	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX.CWMH-01	10	4.082	0.082	10.3	0.0993	0.0000	OK	Pipe 1	OUTFALL	10.2	1.085	0.513	0.0941	4.8
15 minute winter	OUTFALL	10	3.951	0.076	10.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	EX.CWMH-01	18	4.075	0.075	8.8	0.0904	0.0000	OK	Pipe 1	OUTFALL	8.8	1.050	0.443	0.0838	5.6
30 minute summer	OUTFALL	18	3.945	0.070	8.8	0.0000	0.0000	OK							

Results for 100 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	EX.CWMH-01	18	4.070	0.070	8.0	0.0853	0.0000	OK	Pipe 1	OUTFALL	8.0	1.026	0.403	0.0780	6.2
30 minute winter	OUTFALL	18	3.941	0.066	8.0	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	EX.CWMH-01	33	4.063	0.063	6.6	0.0762	0.0000	OK	Pipe 1	OUTFALL	6.6	0.978	0.332	0.0675	7.0
60 minute summer	OUTFALL	33	3.934	0.059	6.6	0.0000	0.0000	OK							

Results for 100 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	EX.CWMH-01	33	4.056	0.056	5.3	0.0672	0.0000	OK	Pipe 1	OUTFALL	5.3	0.925	0.267	0.0573	7.8
60 minute winter	OUTFALL	33	3.928	0.053	5.3	0.0000	0.0000	OK							

Results for 100 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	EX.CWMH-01	64	4.049	0.049	4.2	0.0592	0.0000	OK	Pipe 1	OUTFALL	4.2	0.870	0.211	0.0483	8.4
120 minute summer	OUTFALL	64	3.922	0.047	4.2	0.0000	0.0000	OK							

Results for 100 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	EX.CWMH-01	64	4.043	0.043	3.3	0.0520	0.0000	OK	Pipe 1	OUTFALL	3.3	0.816	0.166	0.0405	9.5
120 minute winter	OUTFALL	64	3.916	0.041	3.3	0.0000	0.0000	OK							

Results for 100 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	EX.CWMH-01	96	4.042	0.042	3.1	0.0503	0.0000	OK	Pipe 1	OUTFALL	3.1	0.802	0.156	0.0387	9.3
180 minute summer	OUTFALL	96	3.915	0.040	3.1	0.0000	0.0000	OK							

Results for 100 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	EX.CWMH-01	96	4.036	0.036	2.4	0.0440	0.0000	OK	Pipe 1	OUTFALL	2.4	0.747	0.121	0.0321	10.4
180 minute winter	OUTFALL	96	3.910	0.035	2.4	0.0000	0.0000	OK							

Results for 100 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	EX.CWMH-01	124	4.038	0.038	2.6	0.0458	0.0000	OK	Pipe 1	OUTFALL	2.6	0.763	0.130	0.0339	9.8
240 minute summer	OUTFALL	124	3.912	0.037	2.6	0.0000	0.0000	OK							

Results for 100 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	EX.CWMH-01	124	4.032	0.032	1.9	0.0390	0.0000	OK	Pipe 1	OUTFALL	1.9	0.700	0.096	0.0271	10.9
240 minute winter	OUTFALL	124	3.906	0.031	1.9	0.0000	0.0000	OK							

Results for 100 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	EX.CWMH-01	184	4.032	0.032	1.9	0.0389	0.0000	OK	Pipe 1	OUTFALL	1.9	0.699	0.095	0.0271	10.9
360 minute summer	OUTFALL	184	3.906	0.031	1.9	0.0000	0.0000	OK							

Results for 100 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	EX.CWMH-01	184	4.028	0.028	1.4	0.0334	0.0000	OK	Pipe 1	OUTFALL	1.4	0.642	0.070	0.0218	12.0
360 minute winter	OUTFALL	184	3.902	0.027	1.4	0.0000	0.0000	OK							

Results for 100 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	EX.CWMH-01	248	4.029	0.029	1.5	0.0346	0.0000	OK	Pipe 1	OUTFALL	1.5	0.655	0.075	0.0229	11.3
480 minute summer	OUTFALL	248	3.903	0.028	1.5	0.0000	0.0000	OK							

Results for 100 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	EX.CWMH-01	240	4.024	0.024	1.1	0.0296	0.0000	OK	Pipe 1	OUTFALL	1.1	0.599	0.055	0.0184	12.8
480 minute winter	OUTFALL	240	3.899	0.024	1.1	0.0000	0.0000	OK							

Results for 100 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	EX.CWMH-01	315	4.026	0.026	1.2	0.0309	0.0000	OK	Pipe 1	OUTFALL	1.2	0.614	0.060	0.0196	11.8
600 minute summer	OUTFALL	315	3.900	0.025	1.2	0.0000	0.0000	OK							

Results for 100 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	EX.CWMH-01	300	4.022	0.022	0.9	0.0268	0.0000	OK	Pipe 1	OUTFALL	0.9	0.565	0.045	0.0159	13.5
600 minute winter	OUTFALL	300	3.897	0.022	0.9	0.0000	0.0000	OK							

Results for 100 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	EX.CWMH-01	375	4.024	0.024	1.1	0.0296	0.0000	OK	Pipe 1	OUTFALL	1.1	0.599	0.055	0.0184	12.2
720 minute summer	OUTFALL	375	3.899	0.024	1.1	0.0000	0.0000	OK							

Results for 100 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	EX.CWMH-01	360	4.021	0.021	0.8	0.0253	0.0000	OK	Pipe 1	OUTFALL	0.8	0.546	0.040	0.0147	13.7
720 minute winter	OUTFALL	360	3.896	0.021	0.8	0.0000	0.0000	OK							

Results for 100 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	EX.CWMH-01	495	4.022	0.022	0.9	0.0268	0.0000	OK	Pipe 1	OUTFALL	0.9	0.565	0.045	0.0159	13.6
960 minute summer	OUTFALL	495	3.897	0.022	0.9	0.0000	0.0000	OK							

Results for 100 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	EX.CWMH-01	450	4.018	0.018	0.6	0.0220	0.0000	OK	Pipe 1	OUTFALL	0.6	0.501	0.030	0.0120	14.2
960 minute winter	OUTFALL	450	3.893	0.018	0.6	0.0000	0.0000	OK							

Results for 100 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	EX.CWMH-01	750	4.018	0.018	0.6	0.0220	0.0000	OK	Pipe 1	OUTFALL	0.6	0.501	0.030	0.0120	15.3
1440 minute summer	OUTFALL	750	3.893	0.018	0.6	0.0000	0.0000	OK							

Results for 100 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	EX.CWMH-01	750	4.017	0.017	0.5	0.0202	0.0000	OK	Pipe 1	OUTFALL	0.5	0.475	0.025	0.0105	16.2
1440 minute winter	OUTFALL	750	3.891	0.016	0.5	0.0000	0.0000	OK							

Results for 100 year 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute summer	EX.CWMH-01	1140	4.015	0.015	0.4	0.0181	0.0000	OK	Pipe 1	OUTFALL	0.4	0.444	0.020	0.0090	14.4
2160 minute summer	OUTFALL	1140	3.890	0.015	0.4	0.0000	0.0000	OK							

Results for 100 year 2160 minute winter. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute winter	EX.CWMH-01	1020	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	18.0
2160 minute winter	OUTFALL	1020	3.888	0.013	0.3	0.0000	0.0000	OK							

Results for 100 year 2880 minute summer. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2880 minute summer	EX.CWMH-01	1500	4.015	0.015	0.4	0.0181	0.0000	OK	Pipe 1	OUTFALL	0.4	0.444	0.020	0.0090	14.4
2880 minute summer	OUTFALL	1500	3.890	0.015	0.4	0.0000	0.0000	OK							

Results for 100 year 2880 minute winter. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2880 minute winter	EX.CWMH-01	1440	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	17.3
2880 minute winter	OUTFALL	1440	3.888	0.013	0.3	0.0000	0.0000	OK							

Results for 100 year 4320 minute summer. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
4320 minute summer	EX.CWMH-01	2220	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	13.7
4320 minute summer	OUTFALL	2220	3.888	0.013	0.3	0.0000	0.0000	OK							

Results for 100 year 4320 minute winter. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
4320 minute winter	EX.CWMH-01	1920	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	17.3
4320 minute winter	OUTFALL	1920	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 100 year 5760 minute summer. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
5760 minute summer	EX.CWMH-01	2760	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	13.7
5760 minute summer	OUTFALL	2760	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 100 year 5760 minute winter. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
5760 minute winter	EX.CWMH-01	2940	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	15.9
5760 minute winter	OUTFALL	2940	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 100 year 7200 minute summer. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
7200 minute summer	EX.CWMH-01	3540	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	13.7
7200 minute summer	OUTFALL	3540	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 100 year 7200 minute winter. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
7200 minute winter	EX.CWMH-01	2340	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	16.6
7200 minute winter	OUTFALL	2340	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 100 year 8640 minute summer. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
8640 minute summer	EX.CWMH-01	4380	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	13.0
8640 minute summer	OUTFALL	4380	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 100 year 8640 minute winter. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
8640 minute winter	EX.CWMH-01	3000	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	17.7
8640 minute winter	OUTFALL	3000	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 100 year 10080 minute summer. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
10080 minute summer	EX.CWMH-01	4080	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	13.0
10080 minute summer	OUTFALL	4080	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 100 year 10080 minute winter. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
10080 minute winter	EX.CWMH-01	3660	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	18.0
10080 minute winter	OUTFALL	3660	3.883	0.008	0.1	0.0000	0.0000	OK							

APPENDIX F – Post-Development Run-off Design

Drainage Design Report

Flow

v6.0

Network	Storm Network
Filename	Z:\Project\1149 - 123 Broadhurst Gardens, NW6\7. Simulation\Pre-Development Run-off\Report.pfd
Username	DESKTOP-G3F0B3Q\sanja
Last analysed	05/04/2018 12:39:00
Report produced on	05/04/2018 12:40:29

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Rainfall Methodology	FSR
Return Period (years)	1
Additional Flow (%)	0
FSR Region	England and Wales
M5-60 (mm)	20.000
Ratio-R	0.400
CV	0.750
Time of Entry (mins)	5.00
Maximum Time of Concentration (mins)	30.00
Maximum Rainfall (mm/hr)	20.0
Minimum Velocity (m/s)	1.00
Connection Type	Level Soffits
Minimum Backdrop Height (m)	0.200
Preferred Cover Depth (m)	1.200
Enforce best practice design rules	

	Name	Area (ha)	T of E (mins)	Add Inflow (l/s)	Cover Level (m)	Node Type	Manhole Type	Diameter (mm)	Width (mm)	Easting (m)	Northing (m)	Depth (m)	Notes
	EX.CWMH-01	0.023	5.00		5.000	Manhole	Adoptable	750	1000			1.000	
	OUTFALL				5.000	Manhole	Adoptable	1200				1.125	

	Name	US Node	DS Node	Length (m)	ks (mm) / n	Velocity Equation	US IL (m)	DS IL (m)	Fall (m)	Slope (1:X)	Dia (mm)	Link Type	T of C (mins)	Rain (mm/hr)	Con Offset (m)	Min DS IL (m)
	Pipe 1	EX.CWMH-01	OUTFALL	10.000	0.600	Colebrook-White	4.000	3.875	0.125	80.0	150	Circular	5.15	20.0		

	Name	US Node	DS Node	Vel (m/s)	Cap (l/s)	Flow (l/s)	US Depth (m)	DS Depth (m)	Minimum Depth (m)	Maximum Depth (m)	Σ Area (ha)	Σ Add Inflow (ha)	Pro Depth (mm)	Pro Velocity (m/s)	Notes
	Pipe 1	EX.CWMH-01	OUTFALL	1.125	19.9	1.2	0.850	0.975	0.850	0.975	0.023	0.0			

Rainfall Methodology	FSR		Return Period (years)	Climate Change (%)
FSR Region	England and Wales		1	0
M5-60 (mm)	20.000		30	0
Ratio-R	0.400		100	0
Summer CV	0.750			
Winter CV	0.840			
Analysis Speed	Detailed			
Drain Down Time (mins)	240			
Additional Storage (m³/ha)	20.0			
Storm Durations (mins)	15			
	30			
	60			
	120			
	180			
	240			
	360			
	480			
	600			
	720			
	960			
	1440			
	2160			
	2880			
	4320			
	5760			
	7200			
	8640			
	10080			
Check Discharge Rate(s)				
1 year (l/s)	0.1			
30 year (l/s)	0.3			
100 year (l/s)	0.4			

Check Discharge Volume				
100 year 15 minute (m³)	3			

Site Makeup	Brownfield
Brownfield Method	Greenfield
Greenfield Method	IH124
Positively Drained Area (ha)	0.023
SAAR (mm)	640
Soil Index	5
SPR	0.53
Region	6
Growth Factor 1 year	0.85
Growth Factor 30 years	2.30
Growth Factor 100 years	3.19
Betterment (%)	0
QBar	0.1
Q 1 year (l/s)	0.1
Q 30 year (l/s)	0.3
Q 100 year (l/s)	0.4

Site Makeup	Brownfield
Brownfield Method	Greenfield
Greenfield Method	FSR/FEH
Positively Drained Area (ha)	0.023
Soil Index	5
SPR	0.53
CWI	96.296
Return Period (years)	100
Climate Change (%)	0
Storm Duration (mins)	15
Betterment (%)	0
PR	0.458
Runoff Volume (m3)	3

Results for 1 year Critical Storm Duration. Lowest mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX.CWMH-01	10	4.042	0.042	3.2	0.0510	0.0000	OK	Pipe 1	OUTFALL	3.2	0.807	0.160	0.0394	1.5
15 minute winter	OUTFALL	10	3.916	0.041	3.2	0.0000	0.0000	OK							

Results for 30 year Critical Storm Duration. Lowest mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX.CWMH-01	10	4.070	0.070	8.0	0.0850	0.0000	OK	Pipe 1	OUTFALL	7.9	1.021	0.398	0.0775	3.7
15 minute winter	OUTFALL	10	3.941	0.066	7.9	0.0000	0.0000	OK							

Results for 100 year Critical Storm Duration. Lowest mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX.CWMH-01	10	4.082	0.082	10.3	0.0993	0.0000	OK	Pipe 1	OUTFALL	10.2	1.085	0.513	0.0941	4.8
15 minute winter	OUTFALL	10	3.951	0.076	10.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	EX.CWMH-01	10	4.041	0.041	3.1	0.0500	0.0000	OK	Pipe 1	OUTFALL	3.1	0.797	0.154	0.0383	1.3
15 minute summer	OUTFALL	10	3.915	0.040	3.1	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX.CWMH-01	10	4.042	0.042	3.2	0.0510	0.0000	OK	Pipe 1	OUTFALL	3.2	0.807	0.160	0.0394	1.5
15 minute winter	OUTFALL	10	3.916	0.041	3.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	EX.CWMH-01	18	4.039	0.039	2.8	0.0477	0.0000	OK	Pipe 1	OUTFALL	2.8	0.780	0.141	0.0359	1.7
30 minute summer	OUTFALL	18	3.913	0.038	2.8	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	EX.CWMH-01	18	4.037	0.037	2.5	0.0449	0.0000	OK	Pipe 1	OUTFALL	2.5	0.756	0.126	0.0331	2.0
30 minute winter	OUTFALL	18	3.911	0.036	2.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	EX.CWMH-01	33	4.034	0.034	2.1	0.0410	0.0000	OK	Pipe 1	OUTFALL	2.1	0.720	0.106	0.0292	2.2
60 minute summer	OUTFALL	33	3.908	0.033	2.1	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	EX.CWMH-01	33	4.030	0.030	1.7	0.0368	0.0000	OK	Pipe 1	OUTFALL	1.7	0.679	0.086	0.0251	2.5
60 minute winter	OUTFALL	33	3.905	0.030	1.7	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	EX.CWMH-01	64	4.028	0.028	1.4	0.0334	0.0000	OK	Pipe 1	OUTFALL	1.4	0.642	0.070	0.0218	2.7
120 minute summer	OUTFALL	64	3.902	0.027	1.4	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	EX.CWMH-01	64	4.024	0.024	1.1	0.0296	0.0000	OK	Pipe 1	OUTFALL	1.1	0.599	0.055	0.0184	3.1
120 minute winter	OUTFALL	64	3.899	0.024	1.1	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	EX.CWMH-01	96	4.023	0.023	1.0	0.0282	0.0000	OK	Pipe 1	OUTFALL	1.0	0.583	0.050	0.0172	3.0
180 minute summer	OUTFALL	96	3.898	0.023	1.0	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	EX.CWMH-01	92	4.021	0.021	0.8	0.0253	0.0000	OK	Pipe 1	OUTFALL	0.8	0.546	0.040	0.0147	3.4
180 minute winter	OUTFALL	92	3.896	0.021	0.8	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	EX.CWMH-01	124	4.022	0.022	0.9	0.0267	0.0000	OK	Pipe 1	OUTFALL	0.9	0.563	0.045	0.0158	3.4
240 minute summer	OUTFALL	124	3.897	0.022	0.9	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	EX.CWMH-01	124	4.019	0.019	0.7	0.0236	0.0000	OK	Pipe 1	OUTFALL	0.7	0.522	0.035	0.0132	3.7
240 minute winter	OUTFALL	124	3.894	0.019	0.7	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	EX.CWMH-01	184	4.020	0.020	0.7	0.0236	0.0000	OK	Pipe 1	OUTFALL	0.7	0.524	0.035	0.0133	4.0
360 minute summer	OUTFALL	184	3.894	0.019	0.7	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	EX.CWMH-01	176	4.017	0.017	0.5	0.0202	0.0000	OK	Pipe 1	OUTFALL	0.5	0.475	0.025	0.0105	4.5
360 minute winter	OUTFALL	176	3.891	0.016	0.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	EX.CWMH-01	240	4.017	0.017	0.5	0.0202	0.0000	OK	Pipe 1	OUTFALL	0.5	0.475	0.025	0.0105	4.3
480 minute summer	OUTFALL	240	3.891	0.016	0.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	EX.CWMH-01	224	4.015	0.015	0.4	0.0181	0.0000	OK	Pipe 1	OUTFALL	0.4	0.444	0.020	0.0090	4.9
480 minute winter	OUTFALL	224	3.890	0.015	0.4	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	EX.CWMH-01	300	4.015	0.015	0.4	0.0181	0.0000	OK	Pipe 1	OUTFALL	0.4	0.444	0.020	0.0090	4.3
600 minute summer	OUTFALL	300	3.890	0.015	0.4	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	EX.CWMH-01	270	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	5.2
600 minute winter	OUTFALL	270	3.888	0.013	0.3	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	EX.CWMH-01	375	4.015	0.015	0.4	0.0181	0.0000	OK	Pipe 1	OUTFALL	0.4	0.444	0.020	0.0090	4.1
720 minute summer	OUTFALL	375	3.890	0.015	0.4	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	EX.CWMH-01	345	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	5.6
720 minute winter	OUTFALL	345	3.888	0.013	0.3	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	EX.CWMH-01	480	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	4.0
960 minute summer	OUTFALL	480	3.888	0.013	0.3	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	EX.CWMH-01	390	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	4.7
960 minute winter	OUTFALL	390	3.886	0.011	0.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	EX.CWMH-01	690	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	4.0
1440 minute summer	OUTFALL	690	3.886	0.011	0.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	EX.CWMH-01	690	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	5.1
1440 minute winter	OUTFALL	690	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 1 year 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute summer	EX.CWMH-01	1140	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	4.3
2160 minute summer	OUTFALL	1140	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 1 year 2160 minute winter. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute winter	EX.CWMH-01	780	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	5.1
2160 minute winter	OUTFALL	780	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 2880 minute summer. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2880 minute summer	EX.CWMH-01	1200	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	4.3
2880 minute summer	OUTFALL	1200	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 2880 minute winter. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2880 minute winter	EX.CWMH-01	1080	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	5.8
2880 minute winter	OUTFALL	1080	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 4320 minute summer. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
4320 minute summer	EX.CWMH-01	1860	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	5.1
4320 minute summer	OUTFALL	1860	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 4320 minute winter. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
4320 minute winter	EX.CWMH-01	1740	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	6.5
4320 minute winter	OUTFALL	1740	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 5760 minute summer. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
5760 minute summer	EX.CWMH-01	2580	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	5.1
5760 minute summer	OUTFALL	2580	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 5760 minute winter. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
5760 minute winter	EX.CWMH-01	2460	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	6.5
5760 minute winter	OUTFALL	2460	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 7200 minute summer. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
7200 minute summer	EX.CWMH-01	3360	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	4.3
7200 minute summer	OUTFALL	3360	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 7200 minute winter. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
7200 minute winter	EX.CWMH-01	3360	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	4.3
7200 minute winter	OUTFALL	3360	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 8640 minute summer. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
8640 minute summer	EX.CWMH-01	4080	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	4.3
8640 minute summer	OUTFALL	4080	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 8640 minute winter. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
8640 minute winter	EX.CWMH-01	60	4.000	0.000	0.0	0.0000	0.0000	OK	Pipe 1	OUTFALL	0.0	0.000	0.000	0.0000	0.0
8640 minute winter	OUTFALL	60	3.875	0.000	0.0	0.0000	0.0000	OK							

Results for 1 year 10080 minute summer. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
10080 minute summer	EX.CWMH-01	4860	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	3.6
10080 minute summer	OUTFALL	4860	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 1 year 10080 minute winter. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
10080 minute winter	EX.CWMH-01	60	4.000	0.000	0.0	0.0000	0.0000	OK	Pipe 1	OUTFALL	0.0	0.000	0.000	0.0000	0.0
10080 minute winter	OUTFALL	60	3.875	0.000	0.0	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	EX.CWMH-01	10	4.068	0.068	7.6	0.0825	0.0000	OK	Pipe 1	OUTFALL	7.5	1.009	0.379	0.0746	3.3
15 minute summer	OUTFALL	10	3.939	0.064	7.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX.CWMH-01	10	4.070	0.070	8.0	0.0850	0.0000	OK	Pipe 1	OUTFALL	7.9	1.021	0.398	0.0775	3.7
15 minute winter	OUTFALL	10	3.941	0.066	7.9	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	EX.CWMH-01	18	4.064	0.064	6.8	0.0775	0.0000	OK	Pipe 1	OUTFALL	6.8	0.986	0.342	0.0690	4.3
30 minute summer	OUTFALL	18	3.935	0.060	6.8	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	EX.CWMH-01	18	4.060	0.060	6.1	0.0728	0.0000	OK	Pipe 1	OUTFALL	6.1	0.959	0.307	0.0636	4.8
30 minute winter	OUTFALL	18	3.932	0.057	6.1	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	EX.CWMH-01	33	4.054	0.054	5.0	0.0651	0.0000	OK	Pipe 1	OUTFALL	5.0	0.911	0.252	0.0549	5.3
60 minute summer	OUTFALL	33	3.926	0.051	5.0	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	EX.CWMH-01	33	4.048	0.048	4.1	0.0584	0.0000	OK	Pipe 1	OUTFALL	4.1	0.864	0.206	0.0474	5.9
60 minute winter	OUTFALL	33	3.921	0.046	4.1	0.0000	0.0000	OK							

Results for 30 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	EX.CWMH-01	64	4.042	0.042	3.2	0.0511	0.0000	OK	Pipe 1	OUTFALL	3.2	0.809	0.161	0.0396	6.4
120 minute summer	OUTFALL	64	3.916	0.041	3.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	EX.CWMH-01	64	4.037	0.037	2.5	0.0449	0.0000	OK	Pipe 1	OUTFALL	2.5	0.756	0.126	0.0331	7.2
120 minute winter	OUTFALL	64	3.911	0.036	2.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	EX.CWMH-01	96	4.036	0.036	2.4	0.0440	0.0000	OK	Pipe 1	OUTFALL	2.4	0.747	0.121	0.0321	7.0
180 minute summer	OUTFALL	96	3.910	0.035	2.4	0.0000	0.0000	OK							

Results for 30 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	EX.CWMH-01	92	4.031	0.031	1.8	0.0379	0.0000	OK	Pipe 1	OUTFALL	1.8	0.690	0.091	0.0261	7.8
180 minute winter	OUTFALL	92	3.905	0.030	1.8	0.0000	0.0000	OK							

Results for 30 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	EX.CWMH-01	124	4.033	0.033	2.0	0.0400	0.0000	OK	Pipe 1	OUTFALL	2.0	0.710	0.100	0.0281	7.6
240 minute summer	OUTFALL	124	3.907	0.032	2.0	0.0000	0.0000	OK							

Results for 30 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	EX.CWMH-01	124	4.029	0.029	1.5	0.0346	0.0000	OK	Pipe 1	OUTFALL	1.5	0.655	0.075	0.0229	8.6
240 minute winter	OUTFALL	124	3.903	0.028	1.5	0.0000	0.0000	OK							

Results for 30 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	EX.CWMH-01	184	4.029	0.029	1.5	0.0345	0.0000	OK	Pipe 1	OUTFALL	1.5	0.653	0.075	0.0229	8.2
360 minute summer	OUTFALL	184	3.903	0.028	1.5	0.0000	0.0000	OK							

Results for 30 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	EX.CWMH-01	184	4.024	0.024	1.1	0.0296	0.0000	OK	Pipe 1	OUTFALL	1.1	0.599	0.055	0.0184	9.3
360 minute winter	OUTFALL	184	3.899	0.024	1.1	0.0000	0.0000	OK							

Results for 30 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	EX.CWMH-01	248	4.026	0.026	1.2	0.0309	0.0000	OK	Pipe 1	OUTFALL	1.2	0.614	0.060	0.0196	8.6
480 minute summer	OUTFALL	248	3.900	0.025	1.2	0.0000	0.0000	OK							

Results for 30 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	EX.CWMH-01	248	4.022	0.022	0.9	0.0268	0.0000	OK	Pipe 1	OUTFALL	0.9	0.565	0.045	0.0159	10.2
480 minute winter	OUTFALL	248	3.897	0.022	0.9	0.0000	0.0000	OK							

Results for 30 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	EX.CWMH-01	315	4.022	0.022	0.9	0.0268	0.0000	OK	Pipe 1	OUTFALL	0.9	0.565	0.045	0.0159	9.3
600 minute summer	OUTFALL	315	3.897	0.022	0.9	0.0000	0.0000	OK							

Results for 30 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	EX.CWMH-01	300	4.020	0.020	0.7	0.0237	0.0000	OK	Pipe 1	OUTFALL	0.7	0.525	0.035	0.0133	10.1
600 minute winter	OUTFALL	300	3.894	0.019	0.7	0.0000	0.0000	OK							

Results for 30 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	EX.CWMH-01	375	4.021	0.021	0.8	0.0253	0.0000	OK	Pipe 1	OUTFALL	0.8	0.546	0.040	0.0147	9.8
720 minute summer	OUTFALL	375	3.896	0.021	0.8	0.0000	0.0000	OK							

Results for 30 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	EX.CWMH-01	345	4.018	0.018	0.6	0.0220	0.0000	OK	Pipe 1	OUTFALL	0.6	0.501	0.030	0.0120	10.6
720 minute winter	OUTFALL	345	3.893	0.018	0.6	0.0000	0.0000	OK							

Results for 30 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	EX.CWMH-01	495	4.020	0.020	0.7	0.0237	0.0000	OK	Pipe 1	OUTFALL	0.7	0.525	0.035	0.0133	11.1
960 minute summer	OUTFALL	495	3.894	0.019	0.7	0.0000	0.0000	OK							

Results for 30 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	EX.CWMH-01	450	4.017	0.017	0.5	0.0202	0.0000	OK	Pipe 1	OUTFALL	0.5	0.475	0.025	0.0105	11.7
960 minute winter	OUTFALL	450	3.891	0.016	0.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	EX.CWMH-01	750	4.017	0.017	0.5	0.0202	0.0000	OK	Pipe 1	OUTFALL	0.5	0.475	0.025	0.0105	11.2
1440 minute summer	OUTFALL	750	3.891	0.016	0.5	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	EX.CWMH-01	720	4.015	0.015	0.4	0.0181	0.0000	OK	Pipe 1	OUTFALL	0.4	0.444	0.020	0.0090	13.7
1440 minute winter	OUTFALL	720	3.890	0.015	0.4	0.0000	0.0000	OK							

Results for 30 year 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute summer	EX.CWMH-01	1080	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	10.8
2160 minute summer	OUTFALL	1080	3.888	0.013	0.3	0.0000	0.0000	OK							

Results for 30 year 2160 minute winter. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute winter	EX.CWMH-01	1140	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	12.3
2160 minute winter	OUTFALL	1140	3.888	0.013	0.3	0.0000	0.0000	OK							

Results for 30 year 2880 minute summer. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2880 minute summer	EX.CWMH-01	1500	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	10.8
2880 minute summer	OUTFALL	1500	3.888	0.013	0.3	0.0000	0.0000	OK							

Results for 30 year 2880 minute winter. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2880 minute winter	EX.CWMH-01	1260	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	12.3
2880 minute winter	OUTFALL	1260	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 30 year 4320 minute summer. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
4320 minute summer	EX.CWMH-01	2100	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	10.1
4320 minute summer	OUTFALL	2100	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 30 year 4320 minute winter. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
4320 minute winter	EX.CWMH-01	2160	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	13.0
4320 minute winter	OUTFALL	2160	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 30 year 5760 minute summer. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
5760 minute summer	EX.CWMH-01	2880	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	10.8
5760 minute summer	OUTFALL	2880	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 30 year 5760 minute winter. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
5760 minute winter	EX.CWMH-01	1920	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	13.0
5760 minute winter	OUTFALL	1920	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 30 year 7200 minute summer. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
7200 minute summer	EX.CWMH-01	2880	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	10.1
7200 minute summer	OUTFALL	2880	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 30 year 7200 minute winter. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
7200 minute winter	EX.CWMH-01	2580	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	13.7
7200 minute winter	OUTFALL	2580	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 30 year 8640 minute summer. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
8640 minute summer	EX.CWMH-01	3540	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	10.8
8640 minute summer	OUTFALL	3540	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 30 year 8640 minute winter. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
8640 minute winter	EX.CWMH-01	3240	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	14.4
8640 minute winter	OUTFALL	3240	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 30 year 10080 minute summer. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
10080 minute summer	EX.CWMH-01	4260	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	10.8
10080 minute summer	OUTFALL	4260	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 30 year 10080 minute winter. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
10080 minute winter	EX.CWMH-01	3960	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	14.4
10080 minute winter	OUTFALL	3960	3.883	0.008	0.1	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute summer	EX.CWMH-01	10	4.080	0.080	9.8	0.0963	0.0000	OK	Pipe 1	OUTFALL	9.7	1.073	0.490	0.0907	4.3
15 minute summer	OUTFALL	10	3.949	0.074	9.7	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
15 minute winter	EX.CWMH-01	10	4.082	0.082	10.3	0.0993	0.0000	OK	Pipe 1	OUTFALL	10.2	1.085	0.513	0.0941	4.8
15 minute winter	OUTFALL	10	3.951	0.076	10.2	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute summer	EX.CWMH-01	18	4.075	0.075	8.8	0.0904	0.0000	OK	Pipe 1	OUTFALL	8.8	1.050	0.443	0.0838	5.6
30 minute summer	OUTFALL	18	3.945	0.070	8.8	0.0000	0.0000	OK							

Results for 100 year 30 minute winter. 270 minute analysis at 1 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
30 minute winter	EX.CWMH-01	18	4.070	0.070	8.0	0.0853	0.0000	OK	Pipe 1	OUTFALL	8.0	1.026	0.403	0.0780	6.2
30 minute winter	OUTFALL	18	3.941	0.066	8.0	0.0000	0.0000	OK							

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

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute summer	EX.CWMH-01	33	4.063	0.063	6.6	0.0762	0.0000	OK	Pipe 1	OUTFALL	6.6	0.978	0.332	0.0675	7.0
60 minute summer	OUTFALL	33	3.934	0.059	6.6	0.0000	0.0000	OK							

Results for 100 year 60 minute winter. 300 minute analysis at 1 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
60 minute winter	EX.CWMH-01	33	4.056	0.056	5.3	0.0672	0.0000	OK	Pipe 1	OUTFALL	5.3	0.925	0.267	0.0573	7.8
60 minute winter	OUTFALL	33	3.928	0.053	5.3	0.0000	0.0000	OK							

Results for 100 year 120 minute summer. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute summer	EX.CWMH-01	64	4.049	0.049	4.2	0.0592	0.0000	OK	Pipe 1	OUTFALL	4.2	0.870	0.211	0.0483	8.4
120 minute summer	OUTFALL	64	3.922	0.047	4.2	0.0000	0.0000	OK							

Results for 100 year 120 minute winter. 360 minute analysis at 2 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
120 minute winter	EX.CWMH-01	64	4.043	0.043	3.3	0.0520	0.0000	OK	Pipe 1	OUTFALL	3.3	0.816	0.166	0.0405	9.5
120 minute winter	OUTFALL	64	3.916	0.041	3.3	0.0000	0.0000	OK							

Results for 100 year 180 minute summer. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute summer	EX.CWMH-01	96	4.042	0.042	3.1	0.0503	0.0000	OK	Pipe 1	OUTFALL	3.1	0.802	0.156	0.0387	9.3
180 minute summer	OUTFALL	96	3.915	0.040	3.1	0.0000	0.0000	OK							

Results for 100 year 180 minute winter. 420 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
180 minute winter	EX.CWMH-01	96	4.036	0.036	2.4	0.0440	0.0000	OK	Pipe 1	OUTFALL	2.4	0.747	0.121	0.0321	10.4
180 minute winter	OUTFALL	96	3.910	0.035	2.4	0.0000	0.0000	OK							

Results for 100 year 240 minute summer. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute summer	EX.CWMH-01	124	4.038	0.038	2.6	0.0458	0.0000	OK	Pipe 1	OUTFALL	2.6	0.763	0.130	0.0339	9.8
240 minute summer	OUTFALL	124	3.912	0.037	2.6	0.0000	0.0000	OK							

Results for 100 year 240 minute winter. 480 minute analysis at 4 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
240 minute winter	EX.CWMH-01	124	4.032	0.032	1.9	0.0390	0.0000	OK	Pipe 1	OUTFALL	1.9	0.700	0.096	0.0271	10.9
240 minute winter	OUTFALL	124	3.906	0.031	1.9	0.0000	0.0000	OK							

Results for 100 year 360 minute summer. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute summer	EX.CWMH-01	184	4.032	0.032	1.9	0.0389	0.0000	OK	Pipe 1	OUTFALL	1.9	0.699	0.095	0.0271	10.9
360 minute summer	OUTFALL	184	3.906	0.031	1.9	0.0000	0.0000	OK							

Results for 100 year 360 minute winter. 600 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
360 minute winter	EX.CWMH-01	184	4.028	0.028	1.4	0.0334	0.0000	OK	Pipe 1	OUTFALL	1.4	0.642	0.070	0.0218	12.0
360 minute winter	OUTFALL	184	3.902	0.027	1.4	0.0000	0.0000	OK							

Results for 100 year 480 minute summer. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute summer	EX.CWMH-01	248	4.029	0.029	1.5	0.0346	0.0000	OK	Pipe 1	OUTFALL	1.5	0.655	0.075	0.0229	11.3
480 minute summer	OUTFALL	248	3.903	0.028	1.5	0.0000	0.0000	OK							

Results for 100 year 480 minute winter. 720 minute analysis at 8 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
480 minute winter	EX.CWMH-01	240	4.024	0.024	1.1	0.0296	0.0000	OK	Pipe 1	OUTFALL	1.1	0.599	0.055	0.0184	12.8
480 minute winter	OUTFALL	240	3.899	0.024	1.1	0.0000	0.0000	OK							

Results for 100 year 600 minute summer. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute summer	EX.CWMH-01	315	4.026	0.026	1.2	0.0309	0.0000	OK	Pipe 1	OUTFALL	1.2	0.614	0.060	0.0196	11.8
600 minute summer	OUTFALL	315	3.900	0.025	1.2	0.0000	0.0000	OK							

Results for 100 year 600 minute winter. 840 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
600 minute winter	EX.CWMH-01	300	4.022	0.022	0.9	0.0268	0.0000	OK	Pipe 1	OUTFALL	0.9	0.565	0.045	0.0159	13.5
600 minute winter	OUTFALL	300	3.897	0.022	0.9	0.0000	0.0000	OK							

Results for 100 year 720 minute summer. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute summer	EX.CWMH-01	375	4.024	0.024	1.1	0.0296	0.0000	OK	Pipe 1	OUTFALL	1.1	0.599	0.055	0.0184	12.2
720 minute summer	OUTFALL	375	3.899	0.024	1.1	0.0000	0.0000	OK							

Results for 100 year 720 minute winter. 960 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
720 minute winter	EX.CWMH-01	360	4.021	0.021	0.8	0.0253	0.0000	OK	Pipe 1	OUTFALL	0.8	0.546	0.040	0.0147	13.7
720 minute winter	OUTFALL	360	3.896	0.021	0.8	0.0000	0.0000	OK							

Results for 100 year 960 minute summer. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute summer	EX.CWMH-01	495	4.022	0.022	0.9	0.0268	0.0000	OK	Pipe 1	OUTFALL	0.9	0.565	0.045	0.0159	13.6
960 minute summer	OUTFALL	495	3.897	0.022	0.9	0.0000	0.0000	OK							

Results for 100 year 960 minute winter. 1200 minute analysis at 15 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
960 minute winter	EX.CWMH-01	450	4.018	0.018	0.6	0.0220	0.0000	OK	Pipe 1	OUTFALL	0.6	0.501	0.030	0.0120	14.2
960 minute winter	OUTFALL	450	3.893	0.018	0.6	0.0000	0.0000	OK							

Results for 100 year 1440 minute summer. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute summer	EX.CWMH-01	750	4.018	0.018	0.6	0.0220	0.0000	OK	Pipe 1	OUTFALL	0.6	0.501	0.030	0.0120	15.3
1440 minute summer	OUTFALL	750	3.893	0.018	0.6	0.0000	0.0000	OK							

Results for 100 year 1440 minute winter. 1680 minute analysis at 30 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
1440 minute winter	EX.CWMH-01	750	4.017	0.017	0.5	0.0202	0.0000	OK	Pipe 1	OUTFALL	0.5	0.475	0.025	0.0105	16.2
1440 minute winter	OUTFALL	750	3.891	0.016	0.5	0.0000	0.0000	OK							

Results for 100 year 2160 minute summer. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute summer	EX.CWMH-01	1140	4.015	0.015	0.4	0.0181	0.0000	OK	Pipe 1	OUTFALL	0.4	0.444	0.020	0.0090	14.4
2160 minute summer	OUTFALL	1140	3.890	0.015	0.4	0.0000	0.0000	OK							

Results for 100 year 2160 minute winter. 2400 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2160 minute winter	EX.CWMH-01	1020	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	18.0
2160 minute winter	OUTFALL	1020	3.888	0.013	0.3	0.0000	0.0000	OK							

Results for 100 year 2880 minute summer. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2880 minute summer	EX.CWMH-01	1500	4.015	0.015	0.4	0.0181	0.0000	OK	Pipe 1	OUTFALL	0.4	0.444	0.020	0.0090	14.4
2880 minute summer	OUTFALL	1500	3.890	0.015	0.4	0.0000	0.0000	OK							

Results for 100 year 2880 minute winter. 3120 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
2880 minute winter	EX.CWMH-01	1440	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	17.3
2880 minute winter	OUTFALL	1440	3.888	0.013	0.3	0.0000	0.0000	OK							

Results for 100 year 4320 minute summer. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
4320 minute summer	EX.CWMH-01	2220	4.013	0.013	0.3	0.0158	0.0000	OK	Pipe 1	OUTFALL	0.3	0.409	0.015	0.0073	13.7
4320 minute summer	OUTFALL	2220	3.888	0.013	0.3	0.0000	0.0000	OK							

Results for 100 year 4320 minute winter. 4560 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
4320 minute winter	EX.CWMH-01	1920	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	17.3
4320 minute winter	OUTFALL	1920	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 100 year 5760 minute summer. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
5760 minute summer	EX.CWMH-01	2760	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	13.7
5760 minute summer	OUTFALL	2760	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 100 year 5760 minute winter. 6000 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
5760 minute winter	EX.CWMH-01	2940	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	15.9
5760 minute winter	OUTFALL	2940	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 100 year 7200 minute summer. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
7200 minute summer	EX.CWMH-01	3540	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	13.7
7200 minute summer	OUTFALL	3540	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 100 year 7200 minute winter. 7440 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
7200 minute winter	EX.CWMH-01	2340	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	16.6
7200 minute winter	OUTFALL	2340	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 100 year 8640 minute summer. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
8640 minute summer	EX.CWMH-01	4380	4.011	0.011	0.2	0.0131	0.0000	OK	Pipe 1	OUTFALL	0.2	0.360	0.010	0.0056	13.0
8640 minute summer	OUTFALL	4380	3.886	0.011	0.2	0.0000	0.0000	OK							

Results for 100 year 8640 minute winter. 8880 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
8640 minute winter	EX.CWMH-01	3000	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	17.7
8640 minute winter	OUTFALL	3000	3.883	0.008	0.1	0.0000	0.0000	OK							

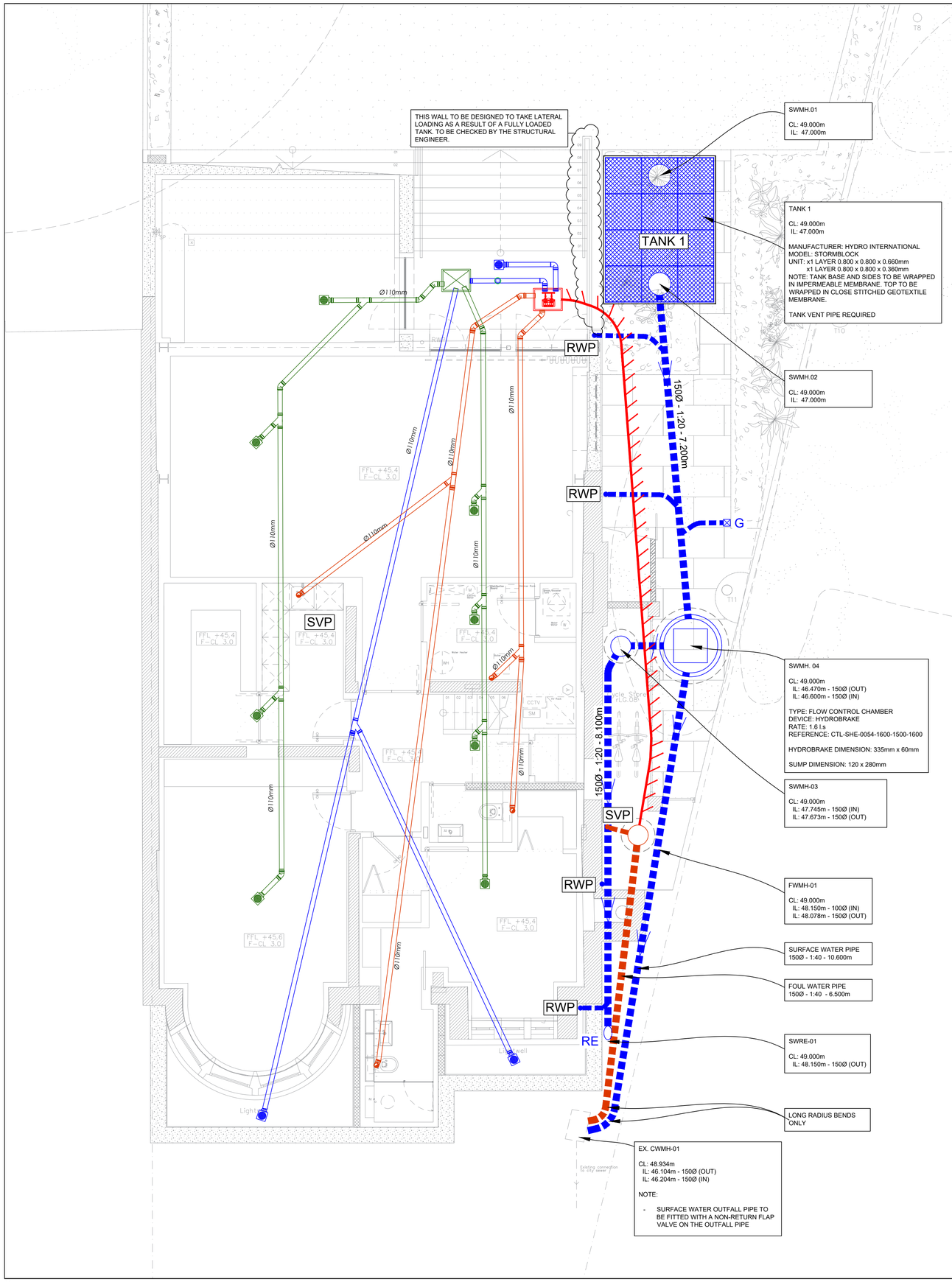
Results for 100 year 10080 minute summer. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
10080 minute summer	EX.CWMH-01	4080	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	13.0
10080 minute summer	OUTFALL	4080	3.883	0.008	0.1	0.0000	0.0000	OK							

Results for 100 year 10080 minute winter. 10320 minute analysis at 60 minute timestep. Mass balance: 100.00%

Event	US Node ID	Peak (mins)	Level (m)	Depth (m)	Inflow (l/s)	Node Vol (m³)	Flood (m³)	Status	Link ID	DS Node ID	Outflow (l/s)	Velocity (m/s)	Flow/Cap	Link Vol (m³)	Discharge Vol (m³)
10080 minute winter	EX.CWMH-01	3660	4.008	0.008	0.1	0.0094	0.0000	OK	Pipe 1	OUTFALL	0.1	0.292	0.005	0.0034	18.0
10080 minute winter	OUTFALL	3660	3.883	0.008	0.1	0.0000	0.0000	OK							

APPENDIX G – Preliminary Drainage Strategy



DRAINAGE KEY:

- Surface Water Pipe
- Surface Water Chamber 450Ø or 1200Ø
- Foul Water Pipe
- Foul Water Chamber 450Ø
- Combined Water Rising Main
- ⊠ G — Surface Water Gully

TANK DESIGN

TANK REFERENCE	TANK INVERT	TANK VOLUME	TANK SIZE
TANK 1	97.000m	7.68 m³	2.4m x 3.2m
TOTAL		7.68 m³	

TANK MODULE:

- STORMBLOC ATTENUATION SYSTEMS
  800mm x 800mm x 660mm
  800mm x 800mm x 360mm
- STORMBLOCK INSPECT SYSTEMS
  800mm x 800mm x 660mm
  x1 FULL UNIT ONLY

CHAMBER SCHEDULE

FOUL WATER CHAMBER					
CHAMBER REFERENCE	CHAMBER SIZE	CHAMBER TYPE	COVER SIZE	COVER TYPE	COVER LOAD GRADE
FWMH-01	450Ø	PPIC	450mm x 450mm	DS + REC + BLTD	B125

SURFACE WATER CHAMBER					
CHAMBER REFERENCE	CHAMBER SIZE	CHAMBER TYPE	COVER SIZE	COVER TYPE	COVER LOAD GRADE
SWRE-01	150Ø RODDING	CAST IRON	250mm x 250mm	DS + BLTD	B125
SWMH-01	600mm x 600mm	PPIC	450mm x 450mm	DS + REC + BLTD	B125
SWMH-02	600mm x 600mm	PPIC	450mm x 450mm	DS + REC + BLTD	B125
SWMH-03	450Ø	PPIC	450mm x 450mm	DS + REC + BLTD	B125
SWMH-04	1200Ø	P.C CONCRETE	450mm x 450mm	DS + REC + BLTD	B125

CHAMBER NOTE:

DS - DOUBLE SEALED COVERS
REC - RECESSED COVERS
BLTD - BOLTED COVERS

DESIGN NOTES:

ALL DRAINAGE SHOULD BE PRICED AS CAST IRON TO BS EN 295.

ANY UTILITIES TRACING / UTILITIES DIVERSIONS AND SEWER CONNECTIONS AGREEMENTS ARE TO BE CARRIED OUT BY THE CONTRACTOR.

ALL NEW SEWER CONNECTIONS ARE SUBJECT TO A NEW CONNECTION AGREEMENT WITH THAMES WATER.

THE CONTRACTOR IS STRONGLY RECOMMENDED TO ADHERE TO MANUFACTURERS INSTALLATION GUIDANCE FOR ANY PRODUCT SHOWN.

REFER TO CONSTRUCTION DETAILS FOR TYPICAL BUILD-UP.

REFER TO ARCHITECTS FLOOR PLAN FOR RAINWATER SETTING OUT DETAILS.

REFER TO M&E FOR FOUL WATER DRAIN POINTS AND SETTING OUT DETAILS.

ALL DRAINAGE WITHIN THE FOOTPRINT OF THE BUILDING IS THE DESIGN RESPONSIBILITY OF THE CONTRACTOR. THE LAYOUT SHOWN WITHIN THE BASEMENT HAS BEEN TRANSCRIBED USING THE CONTRACTORS DRAWINGS.

BUILDING CONTROL SIGN-OFF IS REQUIRED BY THE CONTRACTOR

ALL RWP, SS, SVP, VENT AND GULLY TO BE OF INVERT 48.550m UNLESS OTHERWISE NOTED ON DRAWING.

NOTES

NOTES

ALL DRAINAGE SHALL COMPLY WITH THE TYPICAL DRAINAGE CONSTRUCTION DETAILS AND THE REQUIREMENTS OF BS EN 752.

ACCESS COVERS AND FRAMES SHALL COMPLY WITH THE LOADINGS SPECIFIED AND TO BS EN 124 AND KITEMARKED OR IF RECESSED COVERS ARE SPECIFIED THEN IN ACCORDANCE WITH FACTA ASSOCIATION EQUIVALENT.

THE PROPOSED BUILDING OUTLINES SHOWN ON THIS DRAWING ARE FOR INFORMATION ONLY. REFER TO ARCHITECTS PLANS FOR PRECISE LOCATION SETTING OUT INFORMATION AND DETAILS.

ALL DRAINAGE PIPEWORK SHOWN SHALL BE 100mm DIAMETER UNLESS NOTED OTHERWISE.

ALL UNDERSLAB DRAINAGE SHALL BE LAID AT GRADIENTS OF 1:40 MIN. FOR FOUL PIPEWORK AND 1:80 MIN. FOR SURFACE WATER UNLESS NOTED OTHERWISE.

ALL UNDERSLAB DRAINAGE SHALL BE CLEAR OF FOUNDATIONS UNLESS SHOWN OTHERWISE WITH LONG RADIUS BENDS KEPT TO A MINIMUM AND USED WHERE UNAVOIDABLE.

AT LEAST ONE SOIL PIPE AT THE HEAD OF EACH FOUL RUN SHALL BE VENTED TO THE ATMOSPHERE.

ALL GUTTERS SHALL BE FITTED WITH A LEAF FILTER AT EACH OUTLET TO REDUCE THE RISK OF BLOCKAGE.

ALL RAINWATER DOWNPIPES SHALL BE ACCESSIBLE ABOVE GROUND FOR RODDING PURPOSES.

ANY PART OF THE EXISTING DRAINAGE SYSTEM TO BE RETAINED AS PART OF THE NEW SCHEME SHALL BE CLEANED AND INSPECTED BY CCTV SURVEY. ANY STRUCTURAL DEFECTS SHALL BE REPAIRED OR REPLACED AS MAY BE REQUIRED USING APPROPRIATE AND APPROVED METHODS.

WHERE EXISTING ACCESS LOCATIONS ARE TO BE RETAINED THE COVER AND FRAMES SHALL BE CHECKED TO ENSURE THEY ARE OF A SUITABLE DUTY FOR REUSE AND LEVELS ADJUSTED TO SUIT PROPOSED FINISHED GROUND LEVELS.

ALL INTERNAL AND EXTERNAL ACCESS COVERS SHALL BE RECESSED, DOUBLE SEALED AND LOCKABLE.

COVER LEVELS SHOWN ON THIS DRAWING ARE APPROXIMATE AND SHALL BE ADJUSTED TO SUIT FINISHED PAVEMENT LEVELS ON SITE BY CONTRACTOR. COVERS SHALL BE ORIENTATED TO SUIT PAVEMENT FINISHES WHERE APPROPRIATE.

ALL PRIVATE DRAINAGE PIPEWORK FOR FOUL AND SURFACE WATER SYSTEMS HAVE BEEN DESIGNED ON THE BASIS OF CAST IRON.

ALL ADOPTABLE DRAINAGE PIPEWORK FOR FOUL AND SURFACE WATER SYSTEMS HAVE BEEN DESIGNED ON THE BASIS OF CLAYWARE TO COMPLY WITH SEWERS FOR ADOPTION 6TH EDITION.

CONCRETE ENCASEMENT OF THE PIPEWORK SHALL BE REQUIRED WHERE THE VERTICAL CLEARANCE BETWEEN TWO PIPES CROSSING IS LESS THAN 300MM

ALL EXISTING DRAINAGE SHALL BE ASSUMED TO BE 'LIVE' AND SHALL BE MAINTAINED AT ALL TIMES DURING THE WORKS. EXISTING DRAINAGE SHALL BE RECONNECTED TO THE NEW DRAINAGE SYSTEM UNLESS PROVEN TO BE REDUNDANT FOR ABANDONMENT. ALL EXISTING DRAINAGE TO BE ABANDONED SHALL BE SEALED BY APPROPRIATE MEANS.

ALL DRAINAGE CONNECTING TO THE PUBLIC SEWER NETWORK SHALL NOT COMMENCE UNTIL RECEIPT OF THE APPROVAL FROM THE DRAINAGE AUTHORITY AND SHALL COMPLY WITH REQUIREMENTS USING VITRIFIED CLAY PIPEWORK TO BS EN 295 WITH PLAIN SLEEVED OR SOCKETED FLEXIBLE JOINTS SUBJECT TO THEIR APPROVAL.

WHERE DRAINAGE WORKS ARE CARRIED OUT IN THE PUBLIC HIGHWAY THE RELEVANT NECESSARY APPROVALS AND ROAD OPENING NOTICES SHALL BE OBTAINED FROM THE HIGHWAY AUTHORITY AND UTILITY COMPANIES.

UPON COMPLETION ALL NEW DRAINAGE INSTALLATION TOGETHER WITH ANY EXISTING DRAINAGE RETAINED SHALL BE JETTED AND CCTV SURVEYED UPON COMPLETION. CONTRACTOR TO ENSURE THAT THE DRAINAGE SYSTEM IS FULLY OPERATIONAL, FREE OF EXCESS DEBRIS/SILT AND ALL IDENTIFIED FAULTS RECTIFIED.

AN AIR TIGHTNESS TEST MUST BE PERFORMED FOR THE PIPEWORK THAT SITS WITHIN THE BUILDING TO ENSURE NO LEAKS ARE PRESENT. THE CONTRACTOR IS EXPECTED TO PROVIDE ADDITIONAL WATERTIGHTNESS MEASURES TO PIPEWORK BELOW GROUND.

HEALTH & SAFETY: FUTURE WORKS SHALL BE CARRIED OUT BY SPECIALIST COMPETENT AND EXPERIENCED CONTRACTORS. ALL OPERATIVES SHALL HAVE RECEIVED FULL AND APPROPRIATE TRAINING WITH APPROPRIATE QUALIFICATIONS FOR THE OPERATIONS THEY ARE REQUIRED TO UNDERTAKE. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT HEALTH & SAFETY REGULATIONS.

NOT FOR CONSTRUCTION

Rev.	Description	Date	By
P2	ISSUED FOR INFORMATION	25.05.18	SK
P1	ISSUED FOR INFORMATION	12.09.17	SK

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KENT, DA16 1NR

Job Title: 123 BROADHURST GARDENS

Client: MWA

DRAWING: BELOW GROUND DRAINAGE

1149-SPW-Z0-ZZ-M2-C-06000

Drawn	Date	Scale	Checked	CAD Filename
SK	09.04.18	1:50 @ A1	SK	BGDR

Job No.	Drawing No.	Revision
1149	C-06000	P2

PIPE DIAMETER	CLASS OF BEDDING	IMPORTED GRANULAR MATERIAL (NOTE 1)
100	F S B	10mm nominal size
OVER 100 to 150	F S B	10 or 14mm nom. single size or 14 to 5mm graded
OVER 150 to 150	F S B	10,14,20mm nom. single size or 14 to 5mm graded or 20 to 5mm graded
OVER 500 (note 2)	F S B	10,14,20mm nom. single size crushed rock or 14 to 5mm graded or 20 to 5mm graded or 40 to 5mm graded

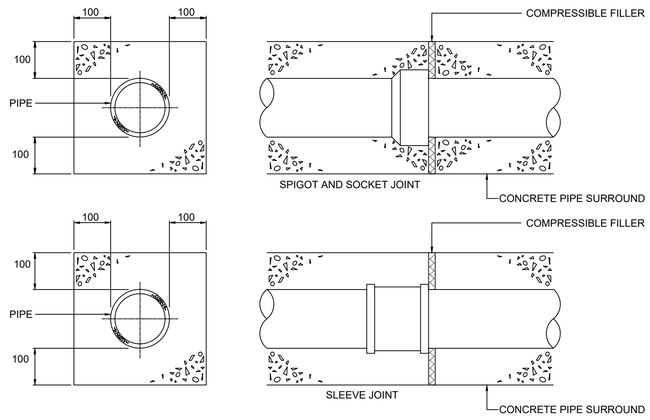
NOTES:

1. IMPORTED GRANULAR MATERIALS TO INCLUDE AGGREGATES AND AIR COOLED BLAST FURNACE SLAG TO BSEN 12620:2002 AND SINTERED PULVERIZED FUEL ASH TO BSEN 13055-1:2002.

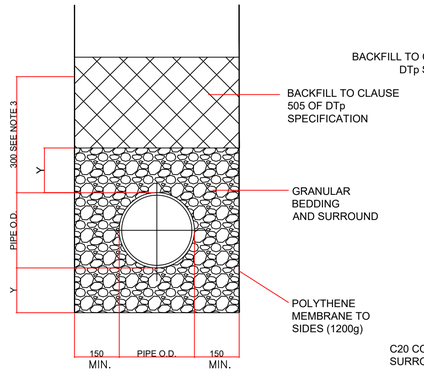
2. ANGULAR MATERIALS SHOULD BE CHOSEN TO ENSURE SUFFICIENT SUPPORT IS PROVIDED TO HEAVIER PIPES

3. CLASS S BEDDING SHALL BE USED WITH ALL FLEXIBLE PIPES

GRANULAR BEDDING & SIDEFILL MATERIALS FOR RIGID AND FLEXIBLE PIPES

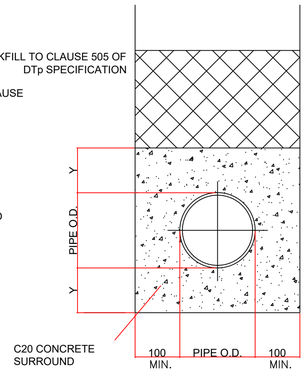


JOINTS FOR CONCRETE ENCASED PIPES



CLASS S BEDDING

GRANULAR BED AND SURROUND
(COVER TO SOFFIT GREATER THAN 1200mm)
(BEDDING FACTOR = 2.2)



CLASS Z BEDDING

PLAIN CONCRETE BED & SURROUND
(COVER TO SOFFIT LESS THAN 1200mm)
(BEDDING FACTOR 4.5)

PIPE DIAMETER	Y minimum		MAXIMUM TRENCH WIDTH	L
	Y1 min.	Y2 min.		
100	100	200	700	18
150	100	200	750	18
200	100	200	800	18
225	100	200	825	18
300	100	200	925	18

NOTES:

1. DIMENSION Y1 SHALL BE USED UNLESS Y2 IS SPECIFIED OR IS DIRECTED BY THE ENGINEER.

2. DIMENSION Y2 SHALL BE USED IN PLACE OF Y1 WHERE THE EXCAVATION IS IN ROCK OR IN MIXED SOILS CONTAINING ROCK BEDS, BOULDERS, LARGE FLINTS OR OTHER IRREGULAR HARD SPOTS.

3. DIMENSION Y2 SHALL BE INCREASE BY 40mm FOR EACH ADDITIONAL 1.0m OF COVER IN EXCESS OF 5.0m.

4. DIMENSION L IS THE WIDTH OF THE COMPRESSIBLE FILLER REQUIRED AT JOINTS IN CONCRETE PROTECTION TO PIPES.

DIMENSIONS FOR PIPE BEDDING

NOTES:

1. REFER TO TABLES FOR DIMENSIONS AND BEDDING DETAILS.
2. IMPORTED GRANULAR MATERIALS TO INCLUDE AGGREGATES AND AIR COOLED BLAST FURNACE SLAG TO BSEN 12620:2002 AND SINTERED PULVERIZED FUEL ASH TO BSEN 13055-1:2002.
3. ANGULAR MATERIALS SHOULD BE CHOSEN TO ENSURE SUFFICIENT SUPPORT IS PROVIDED TO HEAVIER PIPES
4. CLASS S BEDDING SHALL BE USED WITH ALL FLEXIBLE PIPES
5. BEDDING BENEATH AND AT THE SIDES OF THE PIPE TO BE WELL COMPACTED.
6. THE FIRST 300mm OF FILL ABOVE THE CROWN OF THE PIPE IS TO BE LIGHTLY TAMPED BY HAND. MECHANICAL MAY BE USED ONLY ABOVE THIS LEVEL.
7. GEOTEXTILES MAY BE USED WHERE DIRECTED OR APPROVED BY THE ENGINEER TO CONTAIN BEDDING MATERIAL IN CERTAIN SOILS, eg. RUNNING SAND, ETC.
8. IN VERY WET CONDITIONS, WHERE DIRECTED OR APPROVED BY THE ENGINEER A TEMPORARY LAND DRAIN MAY BE LAID WITHIN THE GRANULAR BEDDING.
9. CONCRETE CRADLES AND ARCHES MAY BE EXTENDED TO THE SIDES OF THE TRENCH.
10. WHERE PIPES WITH FLEXIBLE JOINTS ARE USED THE CONCRETE PROTECTION IS TO BE INTERRUPTED OVER ITS FULL CROSS SECTION AT INTERVALS NOT EXCEEDING 5.0m (OR AS INDICATED BY THE ENGINEER) BY A SHAPED FORMER OF BITUMEN IMPREGNATED COMPRESSIBLE FILLER. THESE INTERRUPTIONS SHALL COINCIDE WITH PIPE JOINTS. SEE DIMENSIONS IN PIPE BEDDING TABLE FOR THICKNESS OF COMPRESSIBLE FILLER.
11. CONCRETE TO BE CLASS 2 SULPHATE RESISTING CONCRETE (GRADE GEN3).
12. WHERE FLEXIBLE PIPES ARE USED, CARE MUST BE TAKEN TO PREVENT THE PIPES FROM FLOATING.

GRANULAR BEDDING & SIDEFILL MATERIALS FOR RIGID + FLEXIBLE PIPES

NOTES

GENERAL:

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE STATUTORY UNDERTAKERS, PRIOR TO THE COMMENCEMENT OF THE WORKS, TO ESTABLISH THE EXACT POSITION OF THEIR PLANT, WHICH SHALL BE CONFIRMED BY HAND DUG TRIAL PITS.

3. ALL WORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH WATER SERVICES ASSOCIATION, 'SEWERS FOR ADOPTION', 7th EDITION, DEPARTMENT OF TRANSPORTS 'SPECIFICATION FOR HIGHWAY WORKS' PUBLISHED BY HMSO AND TO THE SATISFACTION OF BUILDING REGULATIONS PART H.

4. ALL CONCRETE AND CONCRETE PRODUCTS BELOW GROUND LEVEL SHALL BE SULPHATE RESISTING PORTLAND CEMENT CLASS GEN3 IN ACCORDANCE WITH BRE SPECIAL DIGEST 1.

5. ALL PIPE CONNECTIONS SHALL BE MADE SOFFIT TO SOFFIT.

6. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE DRAINAGE WORKS FOR THE DURATION OF THE CONTRACT.

7. DRAINS TO BE CONSTRUCTED USING FLEXIBLY JOINTED VITRIFIED CLAY PIPES TO BS 65:1991 "SUPER STRENGTH" SPECIFICATION AND BS EN 295-1:1995 (HEPWORTH SUPERSLEVE OR SIMILAR APPROVED) OR FLEXIBLY JOINTED CONCRETE PIPES TO BS 5911-1:2002 OR UPVC BUILDING DRAINAGE SYSTEM PIPE WORK TO BS EN 1401:2009, BEDDED AND BACK FILLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. ALL TESTED IN ACCORDANCE WITH BS EN 1610:1998.

8. PRIVATE FOUL WATER AND SURFACE WATER DRAINAGE IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE BUILDING REGULATIONS PART H (BS 8301:1985), BS EN 752:2008 AND RELEVANT AGREEMENT CERTIFICATES. ALL TESTED IN ACCORDANCE WITH BS EN 1610:1998.

9. ALL MANHOLE COVERS SHALL BE BADGED 'SW' FOR SURFACE WATER AND 'FW' FOR FOUL WATER ACCORDINGLY.

10. GULLY POTS SHALL BE PROVIDED WITH A HOT DIP GALVANISED STOPPER AND CHAIN WITH A BAYONET TYPE FIXING WITH A 150mmØ OUTLET PIPE.

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NOT FOR CONSTRUCTION

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KENT, DA16 1NR

Job Title: 123 BROADHURST GARDENS

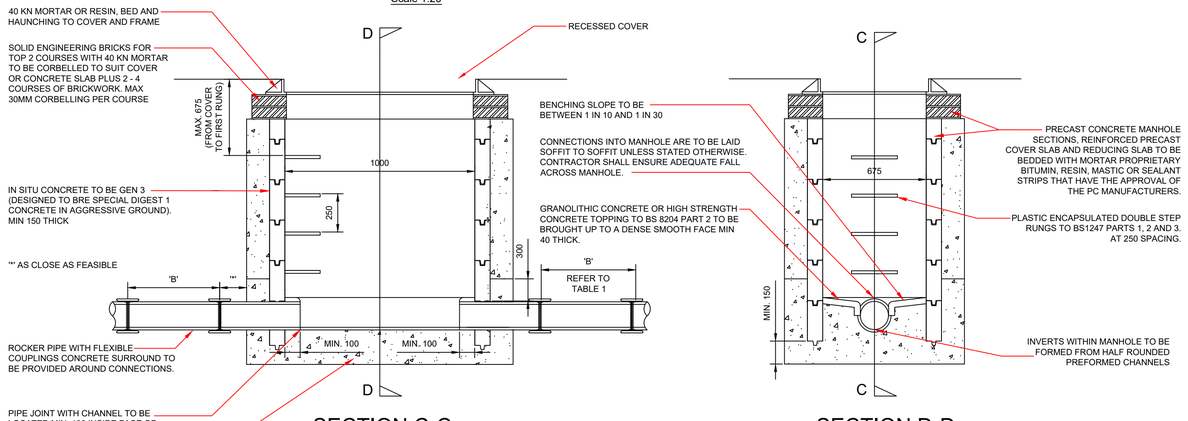
Client: MWA

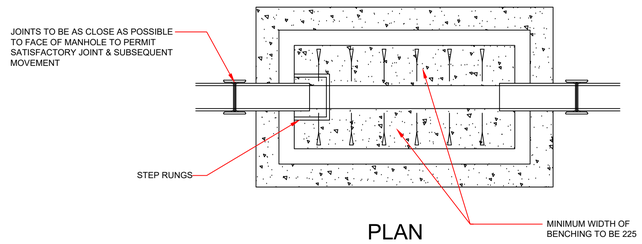
DRAWING: DRAINAGE CONSTRUCTION DETAIL - SHEET 1
1149-SPW-Z0-ZZ-M2-C-06250

Drawn	Date	Scale	Checked	CAD Filename
SK	20.04.18	1:20 @ A1	SK	DET

Job No.	Drawing No.	Revision
1149	C-06250	P1

Scale 1:20





PLAN

NOTE:
PRECAST SLIPPERS SHALL NOT BE USED ON INCOMMING/OUTGOING CONNECTIONS WITHIN MANHOLES.

NOTE:
EXAMPLE SHOWN IS CONSTRUCTED FROM PRECAST CONCRETE RECTANGULAR UNITS TO BS 5911 PART 2, MAY ALSO USE 225 THICK CLASS B BRICKWORK LAID IN ENGLISH BOND COURSING ON CLASS I) MORTAR MIX (1:3 - CEMENT:SAND)

NOTE:
225 THICK CLASS B ENGINEERING BRICKWORK OR PRECAST CONCRETE MANHOLE SECTIONS WITH 150 THICK GEN 3 CONCRETE SURROUND. BRICK BUILD VERSION TO HAVE ARCHES PLACED OVER PIPES.

RECTANGULAR PRECAST CONCRETE MANHOLE DETAIL (MANHOLE TYPE C)

SCALE 1:20

NOTES

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Job Title: 123 BROADHURST GARDENS

Client: MWA

DRAWING: DRAINAGE CONSTRUCTION DETAIL - SHEET 2
1149-SPW-Z0-ZZ-M2-C-06251

Drawn	Date	Scale	Checked	CAD Filename
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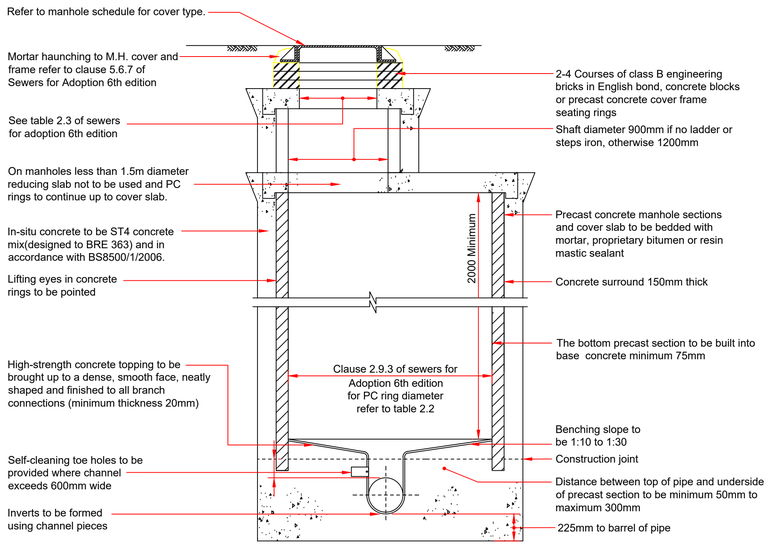
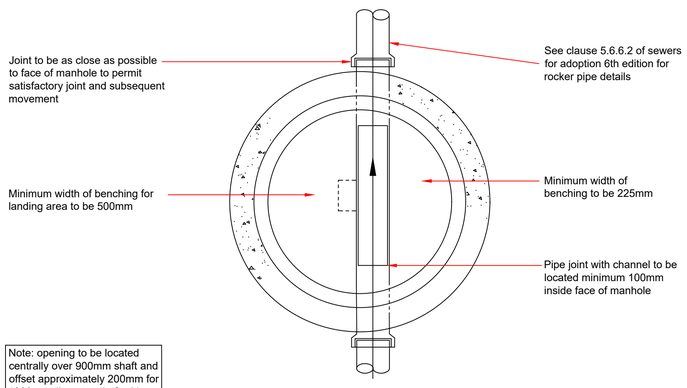
Job No.	Drawing No.	Revision
1149	C-06251	P1



Depth from cover level to soffit of pipe 3m to 6m. for steps and access arrangements see table 2.3 of Sewers for Adoption 6th edition

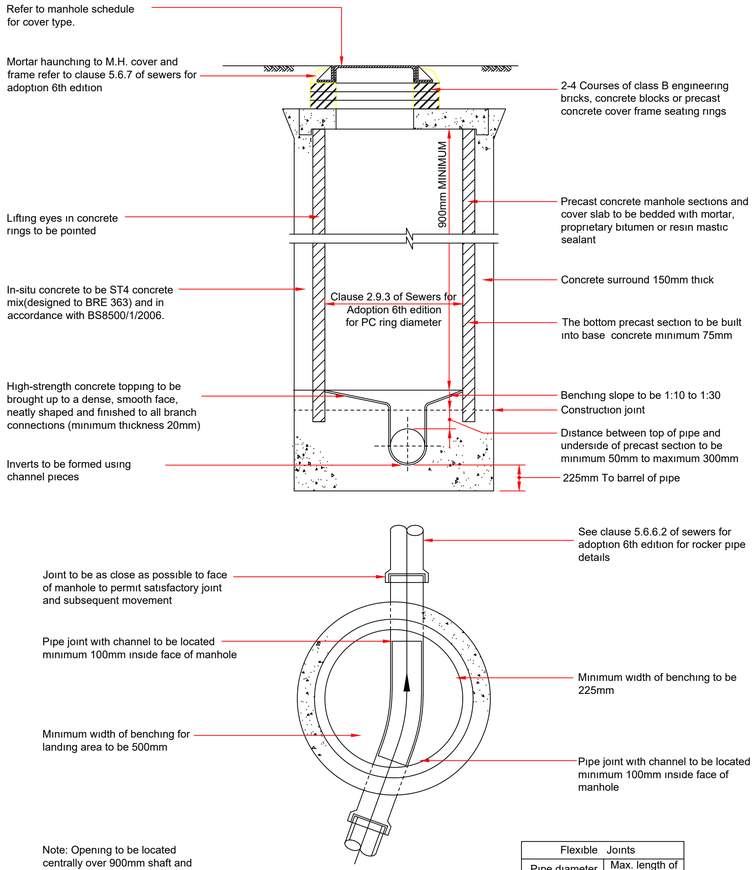
Table 2.2	
Diameter of largest pipe in manhole (mm)	Internal diameter of manhole (mm)
Less than 375	1200
375 - 700	1500
750 - 900	1800
Greater than 900	Consult undertaker



Note: opening to be located centrally over 900mm shaft and offset approximately 200mm for 1200mm diameter shaft with rungs/ladder

Typical Manhole Detail - Type A

Scale 1:20



Note: Opening to be located centrally over 900mm shaft and offset approximately 200mm for 1200mm diameter shaft with rungs/ladder

Flexible Joints	
Pipe diameter	Max. length of rocker pipes
100 & 150 (All spigot)	300mm
150 - 600	625mm
675 - 900	1250mm

Typical Manhole Detail - Type B

Maximum depth from cover level to soffit of pipe 3.0m

Scale 1:20

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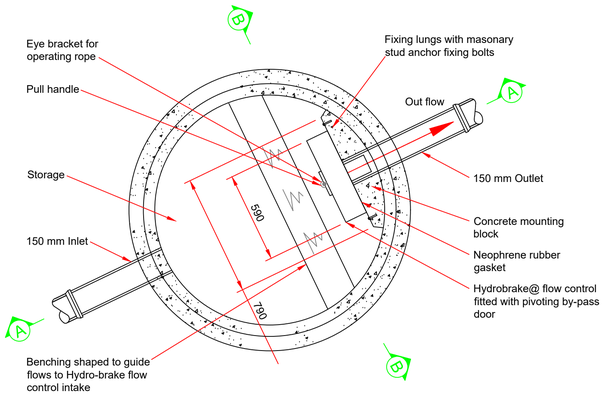
Job Title: 123 BROADHURST GARDENS

Client: MWA

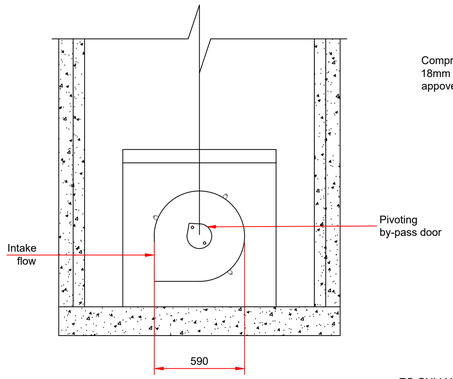
DRAWING: DRAINAGE CONSTRUCTION DETAIL - SHEET 3
1149-SPW-Z0-ZZ-M2-C-06252

Drawn	Date	Scale	Checked	CAD Filename
SK	20.04.18	1:20 @ A1	SK	DET

Job No.	Drawing No.	Revision
1149	C-06252	P1

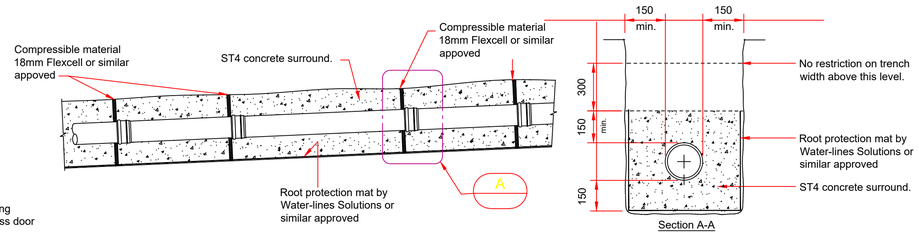


Plan



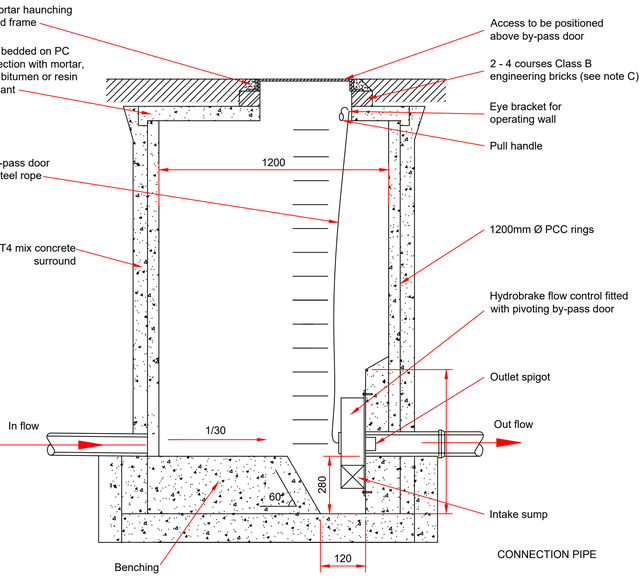
Section B - B

Refer to Manhole Schedule for discharge rate and design head.



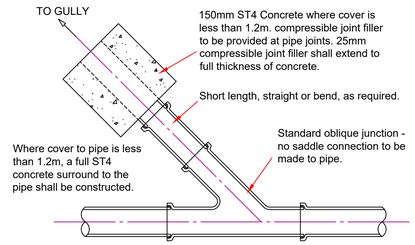
Pipe Protection Against Root Intrusion

(Flexible joints at joint of pipes)
Scale NTS



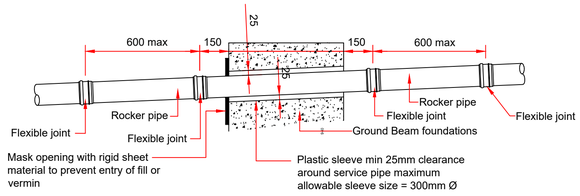
Section A - A
`Hydrobrake` Catchpit manhole Detail

Scale 1:20



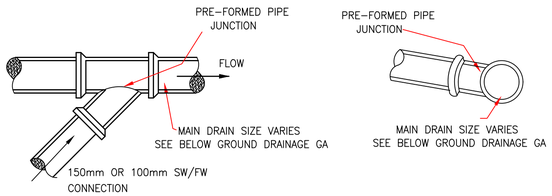
Gully Connection To New Pipe

Scale 1:20

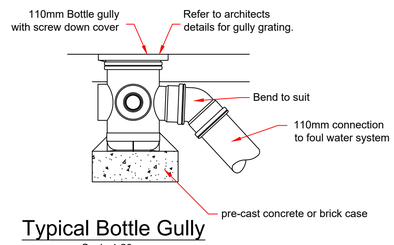


Pipes Passing Through Foundations

Scale 1:20



Typical 'Y' Junction Connection



Typical Bottle Gully

Scale 1:20

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DRAWING: DRAINAGE CONSTRUCTION DETAIL - SHEET 4
1149-SPW-Z0-ZZ-M2-C-06253

Drawn	Date	Scale	Checked	CAD Filename
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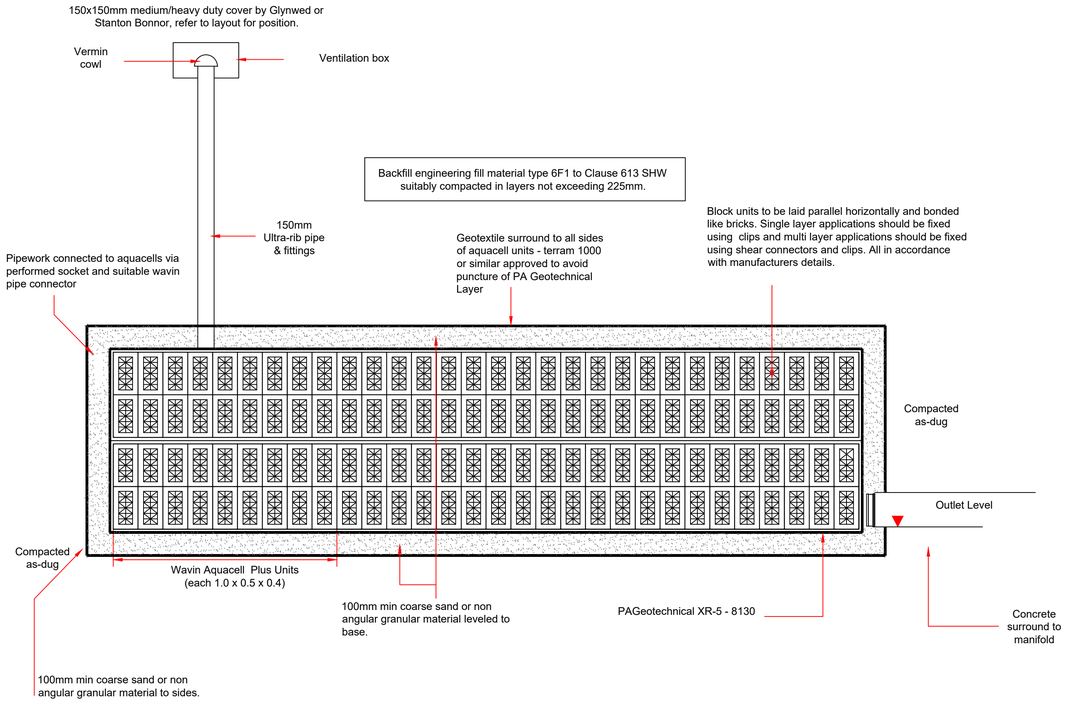

TYPICAL SECTION THROUGH ATTENUATION ARRANGEMENT

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DRAWING: DRAINAGE CONSTRUCTION DETAIL - SHEET 5
149-SPW-Z0-ZZ-M2-C-06254

Drawn	Date	Scale	Checked	CAD Filename
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1149	C-06254	P1