Asset location search

Thames Water Property Searches

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.

Asset location search

Property Searches

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

Property Searches

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: 0800 009 3921
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: 0800 009 3921
Email: developer.services@thameswater.co.uk

Asset Location Search Sewer Map - ALS/ALS Standard/2018_3894324

The width of the displayed area is 500 m and the centre of the map is located at OS coordinates 471389,174004

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
4151	37.98	36.06
41LN	n/a	n/a
4103	37.9	35.68
4002	37.91	35.29
41ZW	n/a	n/a
41MH	n/a	n/a
4101	38.01	35.57
4102	37.99	35.75
41MK	n/a	n/a
41NK	n/a	n/a
501B	n/a	n/a
51NL	n/a	n/a
511C	n/a	n/a
511B	n/a	n/a
511A	n/a	n/a
5051	37.83	36.87
5002	37.85	35.77
501A	n/a	n/a
5001	37.82	35.09
6001	37.84	35.02
6013	37.99	36.73
6007	38.86	35.75
6002	38.24	35.9
6006	38.2	36.47
6011	38.72	36.91
6012	38.64	36.78
6004	38.65	36.25
6005	38.65	36.3
6003	38.62	36.06
4752	n/a	n/a
4751	43.65	40.84
5963	n/a	n/a
5962	37.75	35.61
5756	41.55	n/a
5703	41.51	n/a
6754	n/a	n/a
6704	n/a	n/a
1101	38.24	36.59
12KE	n/a	n/a
1201	38.27	36.1
1106	n/a	n/a
1203	38.1	36.1
221B	n/a	n/a
2202	38.03	35.73
21NH	n/a	n/a
22JC	n/a	n/a
21NF	n/a	n/a
2250	37.99	36.38
2204	n/a	n/a
2150	n/a	n/a
321A	n/a	n/a
3101	38.49	35.55
3201	38.05	36.05
3250	38.1	n/a
3150	38.58	37.95
321D	n/a	n/a
401A	n/a	n/a
4106	37.99	35.38
4150	38.11	36.16
4107	37.93	35.46
4154	n/a	n/a
4153	n/a	n/a
41MF	n/a	n/a
41ZX	n/a	n/a
41MD	n/a	n/a
4001	37.93	35.31
4104	37.74	36.75
4152	n/a	n/a
4105	37.74	35.82
1853	38.07	35.99
1802	38.03	35.55
1852	38.37	n/a
1803	37.86	35.57
2902	37.55	35.75
2952	37.6	n/a
4951	37.92	35.82
3951	37.92	35.83
2953	37.83	n/a
2951	38.06	36.67
2901	38.05	36.26
191B	n/a	n/a
4952	37.91	35.8
191A	n/a	n/a
3956	37.94	35.91
2955	38.25	36.07
2954	37.91	n/a
2904	37.97	n/a
2051	n/a	n/a
201A	n/a	n/a
401B	n/a	n/a
2052	n/a	n/a

Manhole Reference	Manhole Cover Level	Manhole Invert Level
20ZX	n/a	n/a
101C	n/a	n/a
101B	n/a	n/a
101A	n/a	n/a
20NJ	n/a	n/a
1751	n/a	n/a
1701	n/a	n/a
181B	38.5	36.63
1805	38.45	35.43
1854	38.31	36.21
2801	39.02	36.6
281F	n/a	n/a
381C	n/a	n/a
381B	n/a	n/a
381A	n/a	n/a
471B	n/a	n/a
4753	n/a	n/a
4701	n/a	n/a
4702	n/a	n/a
4704	n/a	n/a
4703	n/a	n/a
1858	38.38	n/a
1804	38.41	35.7
1856	38.45	36.46
2754	n/a	n/a
281E	n/a	n/a
281C	n/a	n/a
281D	n/a	n/a
281A	n/a	n/a
281B	n/a	n/a
2803	38.61	36.58
2802	38.81	36.59
271A	n/a	n/a
2851	39.01	36.39

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 combined 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

Dosing (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. Examples are valves, fittings and the functioning of a valve to release excess gas.

Air Valve

Dam/Chase

Fitting

Weir

Vent Column

Operational Controls

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

Control Valve

Flow Pipe

Ancillary

Weir

End Items

End symbols appear at the start or end of a sewer pipe. Examples are an undefined end at the start of a sewer indicates that Thames Water has no knowledge of the position of the sewer upstream of this symbol. Outfall at the 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.

Pump/Private Pumping Station

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

Inverted Siphon

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

Gallery

Converted Watercourse

Proposed

Abandoned Sewer

Notes:

1) All levels associated with the pipe are to Ordnance Datum Newlyn.

2) All measurements on the pipe are metric.

3) Arrows (on gravity fed sewers) or feeds (on rising mains) indicate direction of flow.

4) Vacuum valve positions are not shown on our plans, as the position information has not been recorded.

5) Manhole Cover information indicates the data available.

6) The text accompanying a single sewer line indicates the internal diameter of the pipe in millimetres. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any aspect of symbology present on the plan, please contact a member of Property Insight on 0845 070 9148.

Asset Location Search Water Map - ALS/ALS Standard/2018_3894324

The width of the displayed area is 500 m and the centre of the map is located at OS coordinates 471389, 174004.

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.

ALS Water Map Key

Water Pipes (Operated & Maintained by Thames Water)

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

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.

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

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

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.

PIPE DIAMETER	DEPTH BELOW GROUND
Up to 300mm (12")	900mm (3')
300mm - 600mm (12" - 24")	1100mm (3' 6")
600mm and bigger (24" plus)	1200mm (4')

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

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: Indicates 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 her 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 / OSS	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

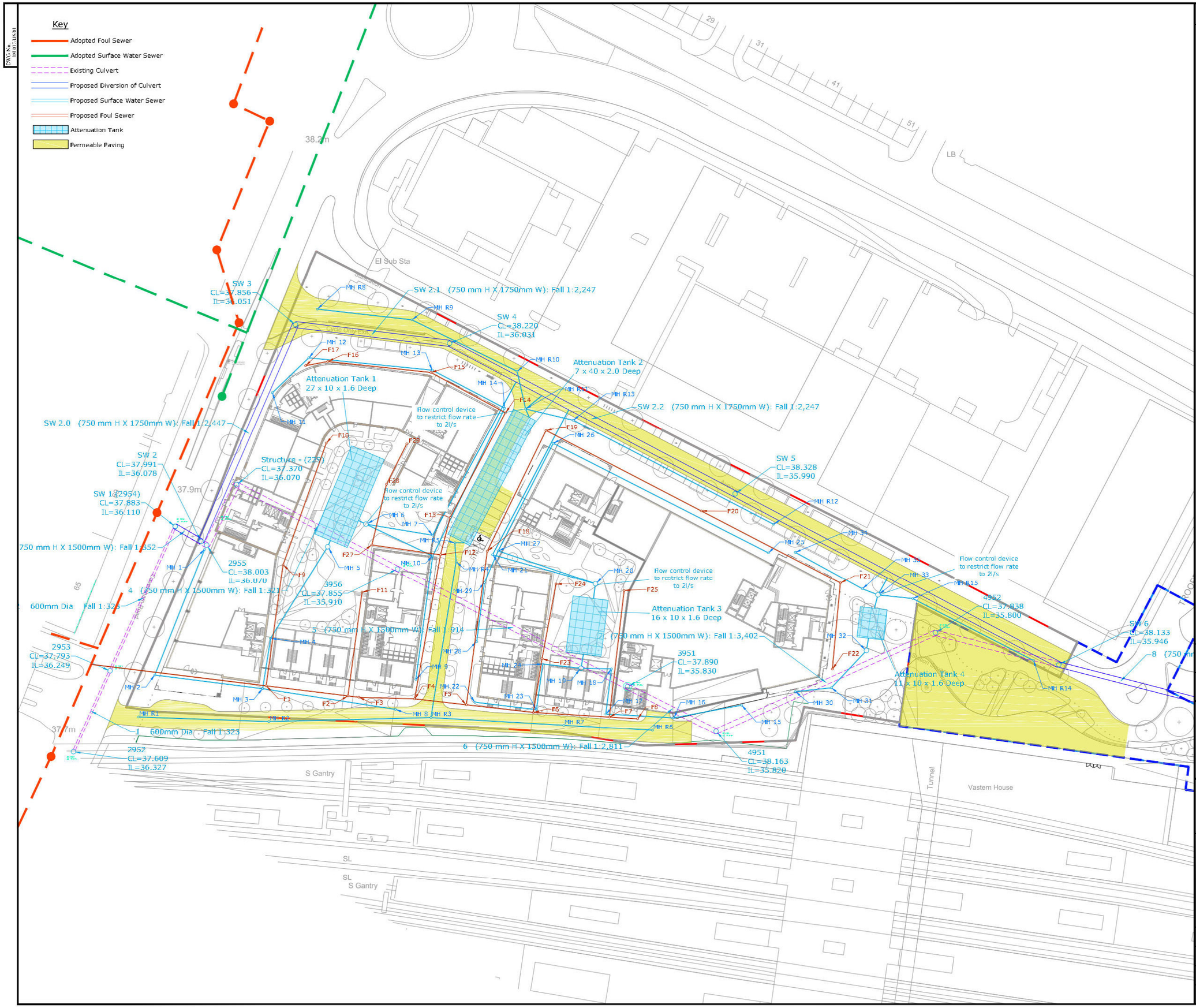
The Property Ombudsman scheme
Milford House
43-55 Milford Street
Salisbury
Wiltshire SP1 2BP
Tel: 01722 333306
Fax: 01722 332296
Email: admin@tpos.co.uk

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 C

Drawing 181017/DS/01 – Drainage Straregy



NOTES

Rev	Amendment	Drawn	Checked	Approved	Date

LANMOR Consulting
Civil Engineers & Transport Planning
Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7HW
Telephone: 0208 339 7899 Fax: 0208 339 7898
e-mail: info@lanmor.co.uk
www.lanmor.co.uk

Hermes

Reading Metropolitan

Indicative Drainage Layout
for Proposed Development

DRAWN: RS		CHECKED: KBL		APPROVED: KBL	
DATE: Nov-18		DATE: Nov-18		DATE: Nov-18	
SCALE: 1:500		PRJ No. 181017		SIZE: A1	REV: -
DWG No. 181017/DS/01					

Drawing 181017/DS/02 – Phasing Plan

NOTES

Rev	Amendment	Drawn	Checked	Approved	Date

LANMOR Consulting
Civil Engineers & Transport Planning
Thorogood House, 34 Tolworth Close, Surbiton, Surrey, KT6 7EW
Telephone: 0208 339 7899 Fax: 0208 339 7898
e-mail: info@lanmor.co.uk
www.lanmor.co.uk

Hermes

Reading Metropolitan

Phasing Layout
for Proposed Development

DRAWN RS	CHECKED KBL	APPROVED KBL
DATE Nov-18	DATE Nov-18	DATE Nov-18
SCALE 1:500	PRJ No. 181017	SIZE A1 / REV -
DWG No. 181017/DS/02		

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APPENDIX D

Attenuation Tank Calculations

Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 1175 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	34.922	0.402	0.0	2.0	2.0	103.1	O K
30 min Summer	35.045	0.525	0.0	2.0	2.0	134.8	O K
60 min Summer	35.171	0.651	0.0	2.0	2.0	167.0	O K
120 min Summer	35.293	0.773	0.0	2.0	2.0	198.2	O K
180 min Summer	35.357	0.837	0.0	2.0	2.0	214.8	O K
240 min Summer	35.397	0.877	0.0	2.0	2.0	224.9	O K
360 min Summer	35.439	0.919	0.0	2.0	2.0	235.7	O K
480 min Summer	35.461	0.941	0.0	2.0	2.0	241.4	O K
600 min Summer	35.471	0.951	0.0	2.0	2.0	243.9	O K
720 min Summer	35.472	0.952	0.0	2.0	2.0	244.2	O K
960 min Summer	35.460	0.940	0.0	2.0	2.0	241.1	O K
1440 min Summer	35.428	0.908	0.0	2.0	2.0	232.9	O K
2160 min Summer	35.375	0.855	0.0	2.0	2.0	219.3	O K
2880 min Summer	35.320	0.800	0.0	2.0	2.0	205.1	O K
4320 min Summer	35.213	0.693	0.0	2.0	2.0	177.7	O K
5760 min Summer	35.115	0.595	0.0	2.0	2.0	152.7	O K
7200 min Summer	35.029	0.509	0.0	2.0	2.0	130.5	O K
8640 min Summer	34.953	0.433	0.0	2.0	2.0	111.0	O K
10080 min Summer	34.888	0.368	0.0	2.0	2.0	94.4	O K
15 min Winter	34.971	0.451	0.0	2.0	2.0	115.6	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	129.089	0.0	99.5	19
30 min Summer	84.848	0.0	127.7	34
60 min Summer	53.188	0.0	171.7	64
120 min Summer	32.259	0.0	207.6	124
180 min Summer	23.779	0.0	228.9	182
240 min Summer	19.047	0.0	243.7	242
360 min Summer	13.827	0.0	263.6	362
480 min Summer	11.024	0.0	278.1	482
600 min Summer	9.241	0.0	288.8	600
720 min Summer	7.997	0.0	296.8	720
960 min Summer	6.361	0.0	306.6	912
1440 min Summer	4.600	0.0	305.2	1126
2160 min Summer	3.321	0.0	387.2	1512
2880 min Summer	2.633	0.0	409.1	1908
4320 min Summer	1.896	0.0	439.8	2724
5760 min Summer	1.500	0.0	466.5	3512
7200 min Summer	1.251	0.0	486.1	4256
8640 min Summer	1.077	0.0	502.5	5008
10080 min Summer	0.949	0.0	516.5	5656
15 min Winter	129.089	0.0	110.6	19

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Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
30 min Winter	35.109	0.589	0.0	2.0	2.0	151.2	O K
60 min Winter	35.251	0.731	0.0	2.0	2.0	187.5	O K
120 min Winter	35.390	0.870	0.0	2.0	2.0	223.1	O K
180 min Winter	35.464	0.944	0.0	2.0	2.0	242.3	O K
240 min Winter	35.511	0.991	0.0	2.0	2.0	254.2	O K
360 min Winter	35.563	1.043	0.0	2.0	2.0	267.5	O K
480 min Winter	35.593	1.073	0.0	2.0	2.0	275.1	O K
600 min Winter	35.608	1.088	0.0	2.0	2.0	279.2	O K
720 min Winter	35.615	1.095	0.0	2.0	2.0	280.9	O K
960 min Winter	35.611	1.091	0.0	2.0	2.0	279.9	O K
1440 min Winter	35.568	1.048	0.0	2.0	2.0	268.7	O K
2160 min Winter	35.497	0.977	0.0	2.0	2.0	250.5	O K
2880 min Winter	35.418	0.898	0.0	2.0	2.0	230.4	O K
4320 min Winter	35.259	0.739	0.0	2.0	2.0	189.6	O K
5760 min Winter	35.112	0.592	0.0	2.0	2.0	151.9	O K
7200 min Winter	34.983	0.463	0.0	2.0	2.0	118.7	O K
8640 min Winter	34.875	0.355	0.0	2.0	2.0	91.0	O K
10080 min Winter	34.789	0.269	0.0	2.0	2.0	69.1	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
30 min Winter	84.848	0.0	140.6	33
60 min Winter	53.188	0.0	192.0	62
120 min Winter	32.259	0.0	231.8	122
180 min Winter	23.779	0.0	255.0	180
240 min Winter	19.047	0.0	270.9	240
360 min Winter	13.827	0.0	291.5	356
480 min Winter	11.024	0.0	305.5	472
600 min Winter	9.241	0.0	314.6	586
720 min Winter	7.997	0.0	320.1	700
960 min Winter	6.361	0.0	321.8	922
1440 min Winter	4.600	0.0	309.9	1314
2160 min Winter	3.321	0.0	433.5	1640
2880 min Winter	2.633	0.0	457.7	2080
4320 min Winter	1.896	0.0	490.5	2944
5760 min Winter	1.500	0.0	522.5	3752
7200 min Winter	1.251	0.0	544.4	4472
8640 min Winter	1.077	0.0	562.9	5184
10080 min Winter	0.949	0.0	578.6	5752

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.800	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.000

Time (mins) From:	To:	Area (ha)
0	4	0.000

Time Area Diagram

Total Area (ha) 0.432

Time (mins) From:	To:	Area (ha)
0	4	0.432

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Model Details

Storage is Online Cover Level (m) 36.820

Cellular Storage Structure

Invert Level (m)	34.520
Infiltration Coefficient Base (m/hr)	0.00000
Infiltration Coefficient Side (m/hr)	0.00000
Safety Factor	2.0
Porosity	0.95

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	270.0	270.0	1.601	0.0	388.4
1.600	270.0	388.4			

Pump Outflow Control

Invert Level (m) 34.520

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.200	2.0000	1.800	2.0000	3.400	2.0000	5.000	2.0000
0.400	2.0000	2.000	2.0000	3.600	2.0000	5.200	2.0000
0.600	2.0000	2.200	2.0000	3.800	2.0000	5.400	2.0000
0.800	2.0000	2.400	2.0000	4.000	2.0000	5.600	2.0000
1.000	2.0000	2.600	2.0000	4.200	2.0000	5.800	2.0000
1.200	2.0000	2.800	2.0000	4.400	2.0000	6.000	2.0000
1.400	2.0000	3.000	2.0000	4.600	2.0000		
1.600	2.0000	3.200	2.0000	4.800	2.0000		

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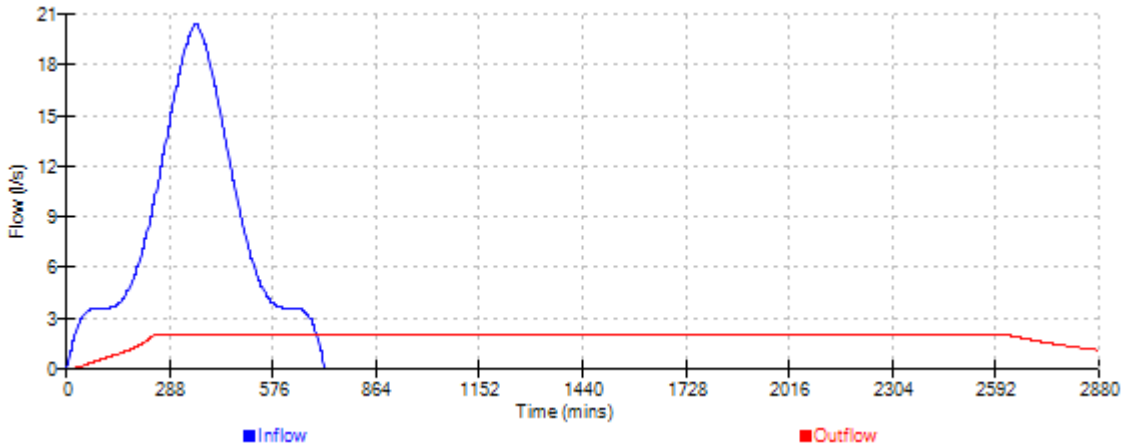
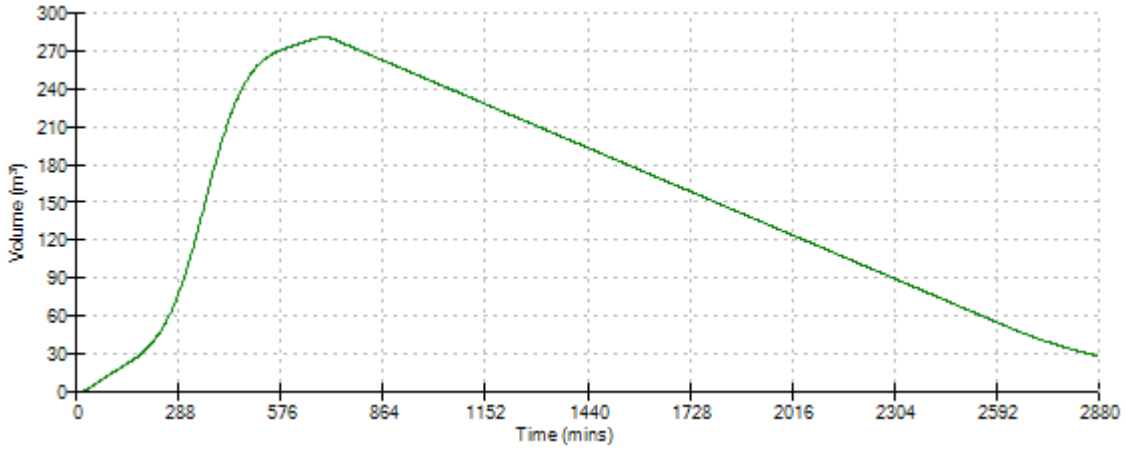
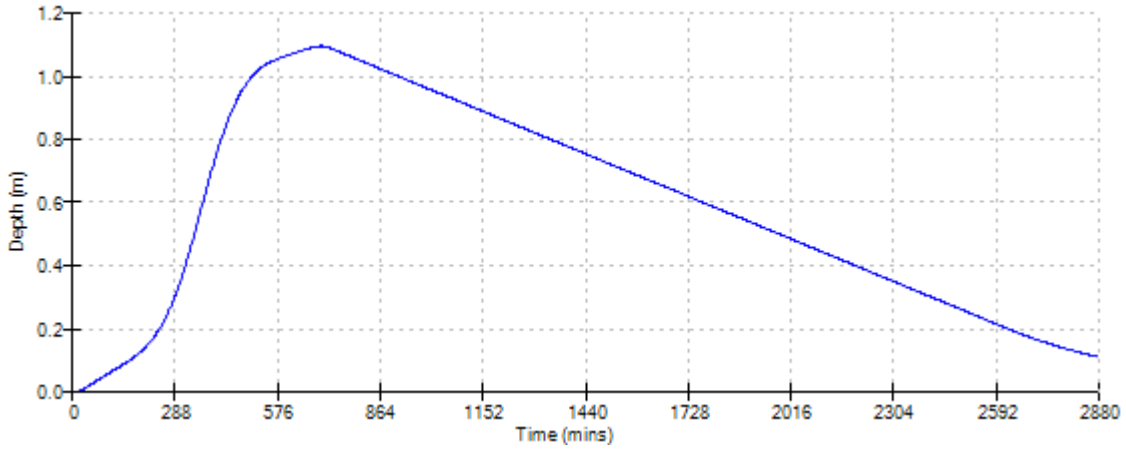
Event: 720 min Winter







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Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 2210 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	35.174	0.654	0.0	2.0	2.0	173.9	O K
30 min Summer	35.376	0.856	0.0	2.0	2.0	227.7	O K
60 min Summer	35.585	1.065	0.0	2.0	2.0	283.3	O K
120 min Summer	35.794	1.274	0.0	2.0	2.0	339.0	O K
180 min Summer	35.911	1.391	0.0	2.0	2.0	370.0	O K
240 min Summer	35.987	1.467	0.0	2.0	2.0	390.2	O K
360 min Summer	36.080	1.560	0.0	2.0	2.0	414.8	O K
480 min Summer	36.140	1.620	0.0	2.0	2.0	431.0	O K
600 min Summer	36.180	1.660	0.0	2.0	2.0	441.7	O K
720 min Summer	36.207	1.687	0.0	2.0	2.0	448.7	O K
960 min Summer	36.233	1.713	0.0	2.0	2.0	455.8	O K
1440 min Summer	36.227	1.707	0.0	2.0	2.0	454.2	O K
2160 min Summer	36.163	1.643	0.0	2.0	2.0	436.9	O K
2880 min Summer	36.097	1.577	0.0	2.0	2.0	419.6	O K
4320 min Summer	35.974	1.454	0.0	2.0	2.0	386.6	O K
5760 min Summer	35.857	1.337	0.0	2.0	2.0	355.5	O K
7200 min Summer	35.746	1.226	0.0	2.0	2.0	326.2	O K
8640 min Summer	35.641	1.121	0.0	2.0	2.0	298.3	O K
10080 min Summer	35.543	1.023	0.0	2.0	2.0	272.1	O K
15 min Winter	35.253	0.733	0.0	2.0	2.0	194.9	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	129.089	0.0	154.6	19
30 min Summer	84.848	0.0	171.7	34
60 min Summer	53.188	0.0	282.2	64
120 min Summer	32.259	0.0	328.0	124
180 min Summer	23.779	0.0	341.2	184
240 min Summer	19.047	0.0	340.5	244
360 min Summer	13.827	0.0	338.3	362
480 min Summer	11.024	0.0	336.3	482
600 min Summer	9.241	0.0	334.2	602
720 min Summer	7.997	0.0	332.1	722
960 min Summer	6.361	0.0	327.8	962
1440 min Summer	4.600	0.0	318.8	1440
2160 min Summer	3.321	0.0	630.2	1856
2880 min Summer	2.633	0.0	631.3	2220
4320 min Summer	1.896	0.0	588.2	2984
5760 min Summer	1.500	0.0	783.2	3800
7200 min Summer	1.251	0.0	816.0	4608
8640 min Summer	1.077	0.0	843.4	5440
10080 min Summer	0.949	0.0	866.5	6160
15 min Winter	129.089	0.0	165.6	19

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Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
30 min Winter	35.480	0.960	0.0	2.0	2.0	255.3	O K
60 min Winter	35.715	1.195	0.0	2.0	2.0	317.9	O K
120 min Winter	35.952	1.432	0.0	2.0	2.0	381.0	O K
180 min Winter	36.085	1.565	0.0	2.0	2.0	416.4	O K
240 min Winter	36.174	1.654	0.0	2.0	2.0	439.9	O K
360 min Winter	36.283	1.763	0.0	2.0	2.0	468.9	O K
480 min Winter	36.356	1.836	0.0	2.0	2.0	488.5	O K
600 min Winter	36.407	1.887	0.0	2.0	2.0	501.9	O K
720 min Winter	36.442	1.922	0.0	2.0	2.0	511.3	O K
960 min Winter	36.484	1.964	0.0	2.0	2.0	522.3	O K
1440 min Winter	36.500	1.980	0.0	2.0	2.0	526.7	O K
2160 min Winter	36.447	1.927	0.0	2.0	2.0	512.5	O K
2880 min Winter	36.356	1.836	0.0	2.0	2.0	488.3	O K
4320 min Winter	36.194	1.674	0.0	2.0	2.0	445.2	O K
5760 min Winter	36.026	1.506	0.0	2.0	2.0	400.5	O K
7200 min Winter	35.861	1.341	0.0	2.0	2.0	356.6	O K
8640 min Winter	35.703	1.183	0.0	2.0	2.0	314.6	O K
10080 min Winter	35.553	1.033	0.0	2.0	2.0	274.8	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
30 min Winter	84.848	0.0	171.8	34
60 min Winter	53.188	0.0	310.5	64
120 min Winter	32.259	0.0	342.8	122
180 min Winter	23.779	0.0	341.8	182
240 min Winter	19.047	0.0	340.8	240
360 min Winter	13.827	0.0	338.8	358
480 min Winter	11.024	0.0	336.8	476
600 min Winter	9.241	0.0	334.9	594
720 min Winter	7.997	0.0	333.0	708
960 min Winter	6.361	0.0	329.1	942
1440 min Winter	4.600	0.0	321.0	1398
2160 min Winter	3.321	0.0	653.6	2052
2880 min Winter	2.633	0.0	638.7	2392
4320 min Winter	1.896	0.0	603.7	3244
5760 min Winter	1.500	0.0	877.1	4152
7200 min Winter	1.251	0.0	913.8	5040
8640 min Winter	1.077	0.0	944.4	5872
10080 min Winter	0.949	0.0	969.7	6656

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.800	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.725

Time (mins) From:	To:	Area (ha)
0	4	0.725

Time Area Diagram

Total Area (ha) 0.000

Time (mins) From:	To:	Area (ha)
0	4	0.000

Time Area Diagram

Total Area (ha) 0.000

Time (mins) From:	To:	Area (ha)
0	4	0.000

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Model Details

Storage is Online Cover Level (m) 36.820

Cellular Storage Structure

Invert Level (m)	34.520
Infiltration Coefficient Base (m/hr)	0.00000
Infiltration Coefficient Side (m/hr)	0.00000
Safety Factor	2.0
Porosity	0.95

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	280.0	108.0	2.001	0.0	232.0
2.000	280.0	232.0			

Pump Outflow Control

Invert Level (m) 34.520

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.200	2.0000	1.800	2.0000	3.400	2.0000	5.000	2.0000
0.400	2.0000	2.000	2.0000	3.600	2.0000	5.200	2.0000
0.600	2.0000	2.200	2.0000	3.800	2.0000	5.400	2.0000
0.800	2.0000	2.400	2.0000	4.000	2.0000	5.600	2.0000
1.000	2.0000	2.600	2.0000	4.200	2.0000	5.800	2.0000
1.200	2.0000	2.800	2.0000	4.400	2.0000	6.000	2.0000
1.400	2.0000	3.000	2.0000	4.600	2.0000		
1.600	2.0000	3.200	2.0000	4.800	2.0000		

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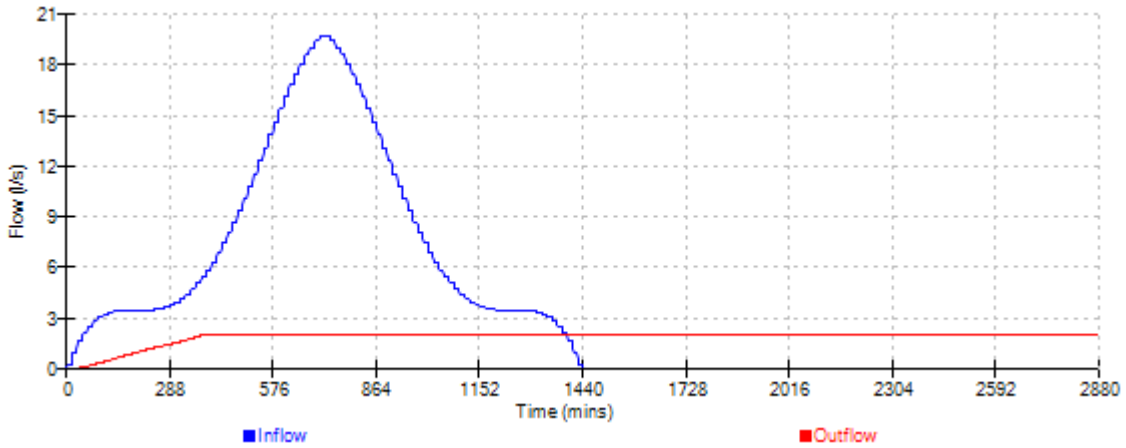
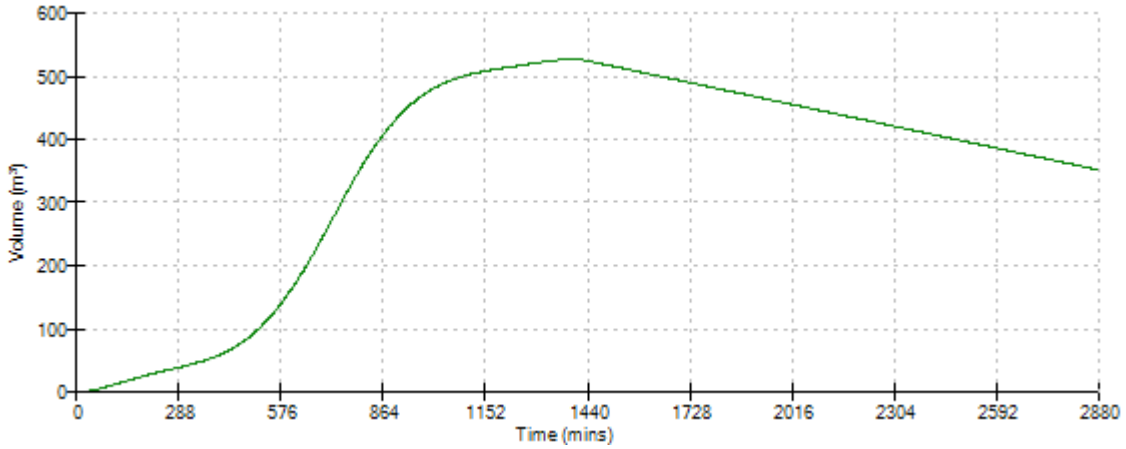
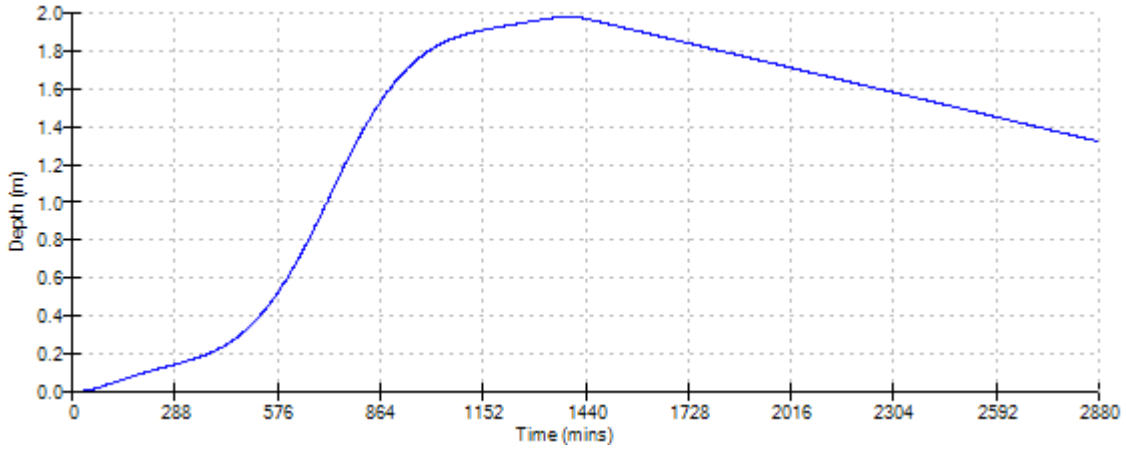
Event: 1440 min Winter







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Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 903 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	35.072	0.552	0.0	2.0	2.0	83.9	O K
30 min Summer	35.240	0.720	0.0	2.0	2.0	109.5	O K
60 min Summer	35.409	0.889	0.0	2.0	2.0	135.1	O K
120 min Summer	35.568	1.048	0.0	2.0	2.0	159.3	O K
180 min Summer	35.649	1.129	0.0	2.0	2.0	171.6	O K
240 min Summer	35.695	1.175	0.0	2.0	2.0	178.6	O K
360 min Summer	35.736	1.216	0.0	2.0	2.0	184.9	O K
480 min Summer	35.751	1.231	0.0	2.0	2.0	187.0	O K
600 min Summer	35.748	1.228	0.0	2.0	2.0	186.7	O K
720 min Summer	35.735	1.215	0.0	2.0	2.0	184.7	O K
960 min Summer	35.705	1.185	0.0	2.0	2.0	180.2	O K
1440 min Summer	35.642	1.122	0.0	2.0	2.0	170.6	O K
2160 min Summer	35.546	1.026	0.0	2.0	2.0	156.0	O K
2880 min Summer	35.453	0.933	0.0	2.0	2.0	141.9	O K
4320 min Summer	35.283	0.763	0.0	2.0	2.0	115.9	O K
5760 min Summer	35.134	0.614	0.0	2.0	2.0	93.3	O K
7200 min Summer	35.009	0.489	0.0	2.0	2.0	74.3	O K
8640 min Summer	34.907	0.387	0.0	2.0	2.0	58.8	O K
10080 min Summer	34.828	0.308	0.0	2.0	2.0	46.8	O K
15 min Winter	35.139	0.619	0.0	2.0	2.0	94.1	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	129.089	0.0	84.8	19
30 min Summer	84.848	0.0	110.7	34
60 min Summer	53.188	0.0	140.7	64
120 min Summer	32.259	0.0	170.7	122
180 min Summer	23.779	0.0	188.8	182
240 min Summer	19.047	0.0	201.6	242
360 min Summer	13.827	0.0	219.4	362
480 min Summer	11.024	0.0	233.1	480
600 min Summer	9.241	0.0	244.0	600
720 min Summer	7.997	0.0	253.1	688
960 min Summer	6.361	0.0	267.5	798
1440 min Summer	4.600	0.0	285.8	1040
2160 min Summer	3.321	0.0	316.5	1448
2880 min Summer	2.633	0.0	334.6	1848
4320 min Summer	1.896	0.0	361.3	2636
5760 min Summer	1.500	0.0	381.2	3400
7200 min Summer	1.251	0.0	397.2	4112
8640 min Summer	1.077	0.0	410.6	4760
10080 min Summer	0.949	0.0	422.2	5448
15 min Winter	129.089	0.0	94.8	19

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Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
30 min Winter	35.328	0.808	0.0	2.0	2.0	122.9	O K
60 min Winter	35.520	1.000	0.0	2.0	2.0	151.9	O K
120 min Winter	35.703	1.183	0.0	2.0	2.0	179.7	O K
180 min Winter	35.797	1.277	0.0	2.0	2.0	194.1	O K
240 min Winter	35.853	1.333	0.0	2.0	2.0	202.6	O K
360 min Winter	35.908	1.388	0.0	2.0	2.0	211.0	O K
480 min Winter	35.934	1.414	0.0	2.0	2.0	214.9	O K
600 min Winter	35.940	1.420	0.0	2.0	2.0	215.8	O K
720 min Winter	35.934	1.414	0.0	2.0	2.0	215.0	O K
960 min Winter	35.901	1.381	0.0	2.0	2.0	210.0	O K
1440 min Winter	35.815	1.295	0.0	2.0	2.0	196.8	O K
2160 min Winter	35.681	1.161	0.0	2.0	2.0	176.5	O K
2880 min Winter	35.543	1.023	0.0	2.0	2.0	155.5	O K
4320 min Winter	35.284	0.764	0.0	2.0	2.0	116.1	O K
5760 min Winter	35.063	0.543	0.0	2.0	2.0	82.5	O K
7200 min Winter	34.887	0.367	0.0	2.0	2.0	55.8	O K
8640 min Winter	34.764	0.244	0.0	2.0	2.0	37.1	O K
10080 min Winter	34.713	0.193	0.0	1.9	1.9	29.3	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
30 min Winter	84.848	0.0	123.3	33
60 min Winter	53.188	0.0	157.6	62
120 min Winter	32.259	0.0	191.2	122
180 min Winter	23.779	0.0	211.4	180
240 min Winter	19.047	0.0	225.7	238
360 min Winter	13.827	0.0	245.4	354
480 min Winter	11.024	0.0	260.5	468
600 min Winter	9.241	0.0	272.4	582
720 min Winter	7.997	0.0	282.1	692
960 min Winter	6.361	0.0	296.6	904
1440 min Winter	4.600	0.0	309.7	1124
2160 min Winter	3.321	0.0	354.5	1576
2880 min Winter	2.633	0.0	374.8	2016
4320 min Winter	1.896	0.0	404.7	2852
5760 min Winter	1.500	0.0	427.1	3576
7200 min Winter	1.251	0.0	445.0	4248
8640 min Winter	1.077	0.0	459.9	4760
10080 min Winter	0.949	0.0	472.9	5248

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.800	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.353

Time (mins) From:	To:	Area (ha)
0	4	0.353

Time Area Diagram

Total Area (ha) 0.000

Time (mins) From:	To:	Area (ha)
0	4	0.000

Time Area Diagram

Total Area (ha) 0.000

Time (mins) From:	To:	Area (ha)
0	4	0.000

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Model Details

Storage is Online Cover Level (m) 36.820

Cellular Storage Structure

Invert Level (m)	34.520
Infiltration Coefficient Base (m/hr)	0.00000
Infiltration Coefficient Side (m/hr)	0.00000
Safety Factor	2.0
Porosity	0.95

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	160.0	160.0	1.601	0.0	243.2
1.600	160.0	243.2			

Pump Outflow Control

Invert Level (m) 34.520

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.200	2.0000	1.800	2.0000	3.400	2.0000	5.000	2.0000
0.400	2.0000	2.000	2.0000	3.600	2.0000	5.200	2.0000
0.600	2.0000	2.200	2.0000	3.800	2.0000	5.400	2.0000
0.800	2.0000	2.400	2.0000	4.000	2.0000	5.600	2.0000
1.000	2.0000	2.600	2.0000	4.200	2.0000	5.800	2.0000
1.200	2.0000	2.800	2.0000	4.400	2.0000	6.000	2.0000
1.400	2.0000	3.000	2.0000	4.600	2.0000		
1.600	2.0000	3.200	2.0000	4.800	2.0000		

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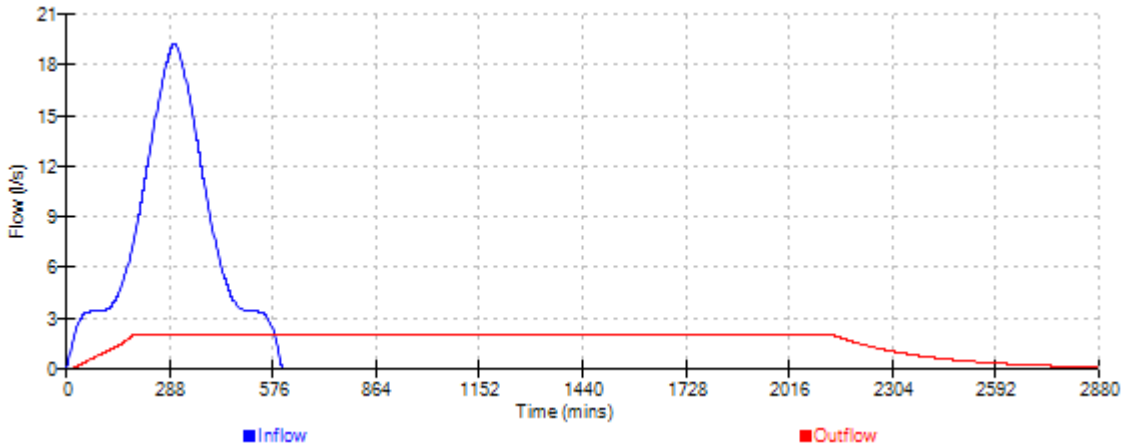
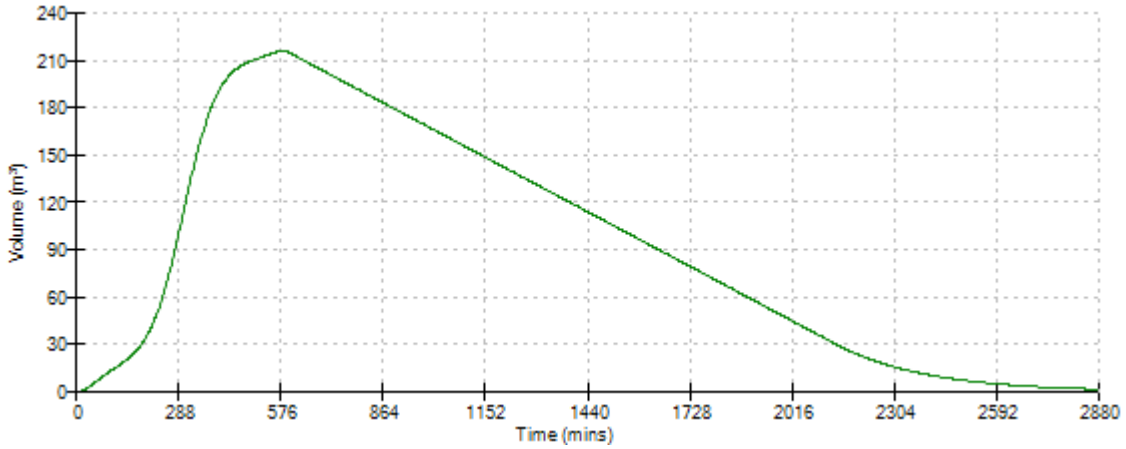
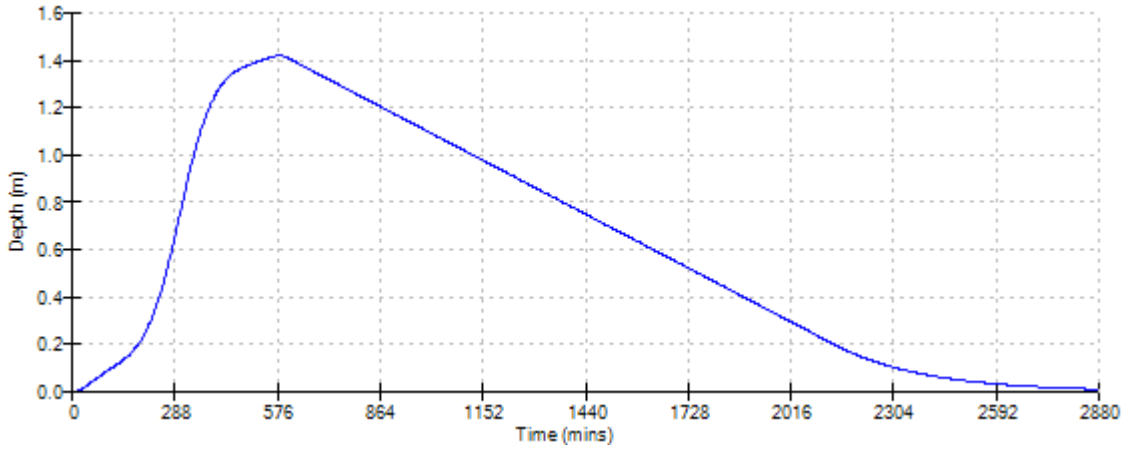
Event: 600 min Winter







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Summary of Results for 100 year Return Period (+40%)

Half Drain Time : 573 minutes.

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
15 min Summer	35.073	0.553	0.0	2.0	2.0	57.8	O K
30 min Summer	35.239	0.719	0.0	2.0	2.0	75.1	O K
60 min Summer	35.401	0.881	0.0	2.0	2.0	92.0	O K
120 min Summer	35.546	1.026	0.0	2.0	2.0	107.2	O K
180 min Summer	35.610	1.090	0.0	2.0	2.0	114.0	O K
240 min Summer	35.641	1.121	0.0	2.0	2.0	117.1	O K
360 min Summer	35.650	1.130	0.0	2.0	2.0	118.1	O K
480 min Summer	35.635	1.115	0.0	2.0	2.0	116.5	O K
600 min Summer	35.616	1.096	0.0	2.0	2.0	114.6	O K
720 min Summer	35.596	1.076	0.0	2.0	2.0	112.4	O K
960 min Summer	35.553	1.033	0.0	2.0	2.0	107.9	O K
1440 min Summer	35.463	0.943	0.0	2.0	2.0	98.6	O K
2160 min Summer	35.334	0.814	0.0	2.0	2.0	85.1	O K
2880 min Summer	35.216	0.696	0.0	2.0	2.0	72.7	O K
4320 min Summer	35.017	0.497	0.0	2.0	2.0	51.9	O K
5760 min Summer	34.871	0.351	0.0	2.0	2.0	36.6	O K
7200 min Summer	34.773	0.253	0.0	2.0	2.0	26.4	O K
8640 min Summer	34.720	0.200	0.0	2.0	2.0	20.9	O K
10080 min Summer	34.699	0.179	0.0	1.8	1.8	18.7	O K
15 min Winter	35.141	0.621	0.0	2.0	2.0	64.9	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
15 min Summer	129.089	0.0	59.2	19
30 min Summer	84.848	0.0	77.9	33
60 min Summer	53.188	0.0	97.7	64
120 min Summer	32.259	0.0	118.5	122
180 min Summer	23.779	0.0	131.0	182
240 min Summer	19.047	0.0	139.9	242
360 min Summer	13.827	0.0	152.4	360
480 min Summer	11.024	0.0	162.0	448
600 min Summer	9.241	0.0	169.8	500
720 min Summer	7.997	0.0	176.3	560
960 min Summer	6.361	0.0	187.0	684
1440 min Summer	4.600	0.0	202.8	954
2160 min Summer	3.321	0.0	219.6	1360
2880 min Summer	2.633	0.0	232.2	1756
4320 min Summer	1.896	0.0	250.8	2504
5760 min Summer	1.500	0.0	264.6	3176
7200 min Summer	1.251	0.0	275.7	3824
8640 min Summer	1.077	0.0	285.0	4416
10080 min Summer	0.949	0.0	293.0	5144
15 min Winter	129.089	0.0	66.4	19

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Summary of Results for 100 year Return Period (+40%)

Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Control (l/s)	Max Σ Outflow (l/s)	Max Volume (m³)	Status
30 min Winter	35.328	0.808	0.0	2.0	2.0	84.4	O K
60 min Winter	35.513	0.993	0.0	2.0	2.0	103.7	O K
120 min Winter	35.681	1.161	0.0	2.0	2.0	121.3	O K
180 min Winter	35.760	1.240	0.0	2.0	2.0	129.5	O K
240 min Winter	35.800	1.280	0.0	2.0	2.0	133.7	O K
360 min Winter	35.823	1.303	0.0	2.0	2.0	136.2	O K
480 min Winter	35.818	1.298	0.0	2.0	2.0	135.7	O K
600 min Winter	35.796	1.276	0.0	2.0	2.0	133.4	O K
720 min Winter	35.765	1.245	0.0	2.0	2.0	130.1	O K
960 min Winter	35.708	1.188	0.0	2.0	2.0	124.2	O K
1440 min Winter	35.582	1.062	0.0	2.0	2.0	111.0	O K
2160 min Winter	35.388	0.868	0.0	2.0	2.0	90.7	O K
2880 min Winter	35.208	0.688	0.0	2.0	2.0	71.9	O K
4320 min Winter	34.917	0.397	0.0	2.0	2.0	41.5	O K
5760 min Winter	34.740	0.220	0.0	2.0	2.0	23.0	O K
7200 min Winter	34.697	0.177	0.0	1.8	1.8	18.5	O K
8640 min Winter	34.673	0.153	0.0	1.5	1.5	16.0	O K
10080 min Winter	34.655	0.135	0.0	1.4	1.4	14.2	O K

Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Discharge Volume (m³)	Time-Peak (mins)
30 min Winter	84.848	0.0	87.2	33
60 min Winter	53.188	0.0	109.4	62
120 min Winter	32.259	0.0	132.8	120
180 min Winter	23.779	0.0	146.8	178
240 min Winter	19.047	0.0	156.8	236
360 min Winter	13.827	0.0	170.7	350
480 min Winter	11.024	0.0	181.5	460
600 min Winter	9.241	0.0	190.2	566
720 min Winter	7.997	0.0	197.4	656
960 min Winter	6.361	0.0	209.4	742
1440 min Winter	4.600	0.0	227.1	1040
2160 min Winter	3.321	0.0	246.0	1472
2880 min Winter	2.633	0.0	260.1	1876
4320 min Winter	1.896	0.0	280.9	2592
5760 min Winter	1.500	0.0	296.4	3120
7200 min Winter	1.251	0.0	308.8	3744
8640 min Winter	1.077	0.0	319.2	4488
10080 min Winter	0.949	0.0	328.2	5240

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Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.800	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.245

Time (mins) From:	To:	Area (ha)
0	4	0.245

Time Area Diagram

Total Area (ha) 0.000

Time (mins) From:	To:	Area (ha)
0	4	0.000

Time Area Diagram

Total Area (ha) 0.000

Time (mins) From:	To:	Area (ha)
0	4	0.000

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Model Details

Storage is Online Cover Level (m) 36.820

Cellular Storage Structure

Invert Level (m)	34.520
Infiltration Coefficient Base (m/hr)	0.00000
Infiltration Coefficient Side (m/hr)	0.00000
Safety Factor	2.0
Porosity	0.95

Depth (m)	Area (m²)	Inf. Area (m²)	Depth (m)	Area (m²)	Inf. Area (m²)
0.000	110.0	110.0	1.601	0.0	177.2
1.600	110.0	177.2			

Pump Outflow Control

Invert Level (m) 34.520

Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)	Depth (m)	Flow (l/s)
0.200	2.0000	1.800	2.0000	3.400	2.0000	5.000	2.0000
0.400	2.0000	2.000	2.0000	3.600	2.0000	5.200	2.0000
0.600	2.0000	2.200	2.0000	3.800	2.0000	5.400	2.0000
0.800	2.0000	2.400	2.0000	4.000	2.0000	5.600	2.0000
1.000	2.0000	2.600	2.0000	4.200	2.0000	5.800	2.0000
1.200	2.0000	2.800	2.0000	4.400	2.0000	6.000	2.0000
1.400	2.0000	3.000	2.0000	4.600	2.0000		
1.600	2.0000	3.200	2.0000	4.800	2.0000		

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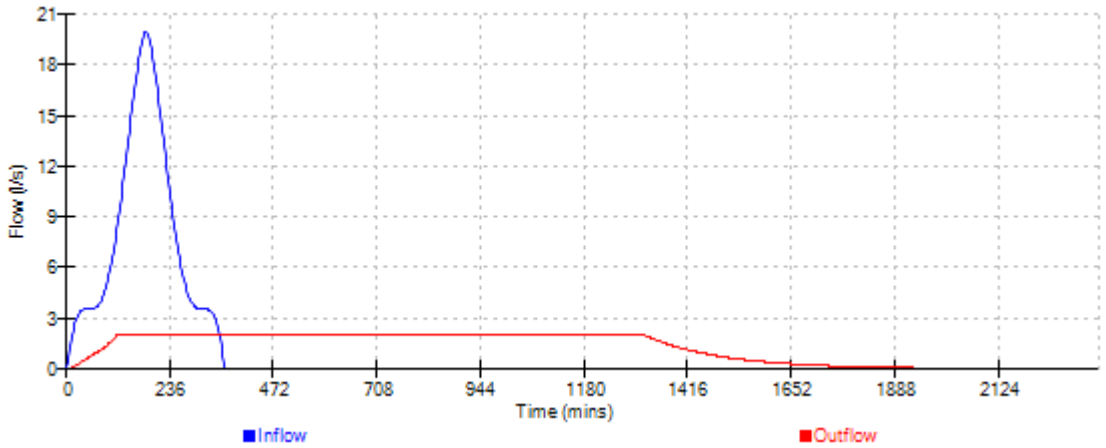
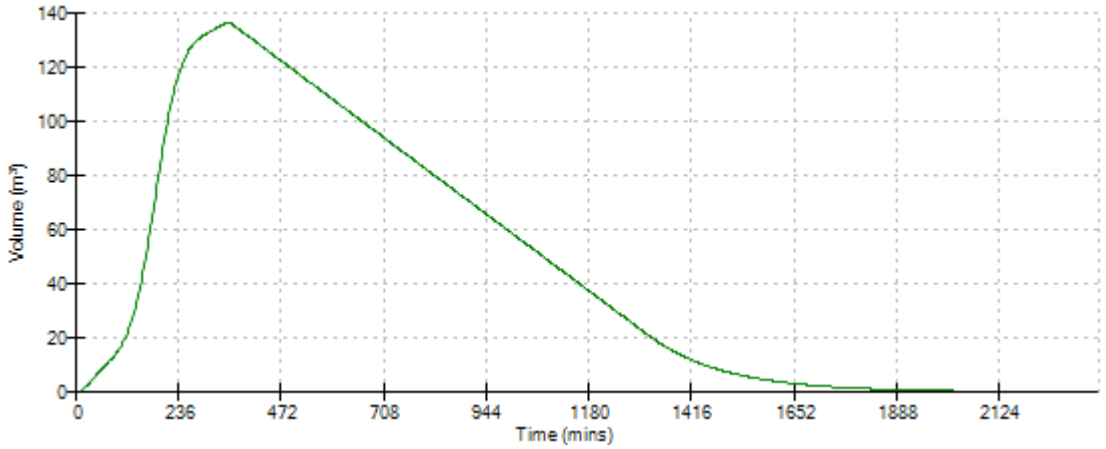
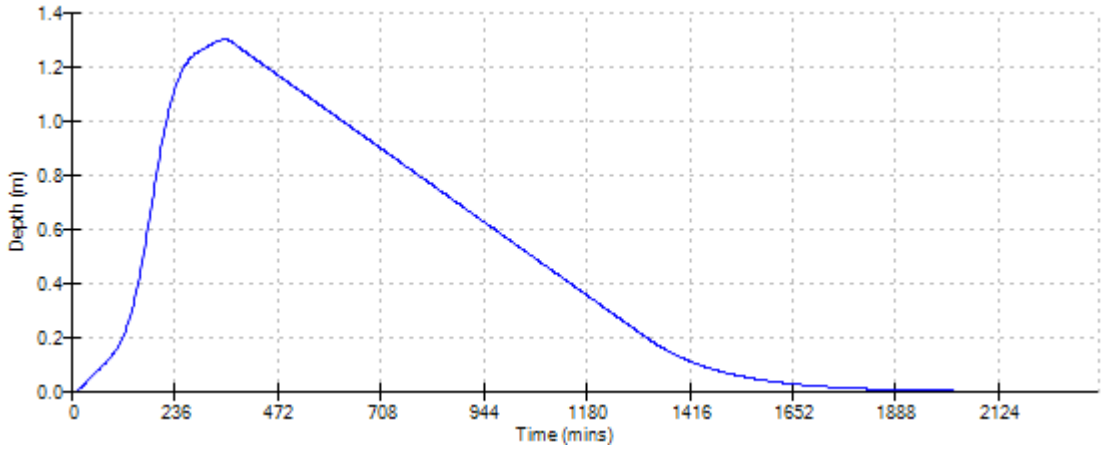
Event: 360 min Winter







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