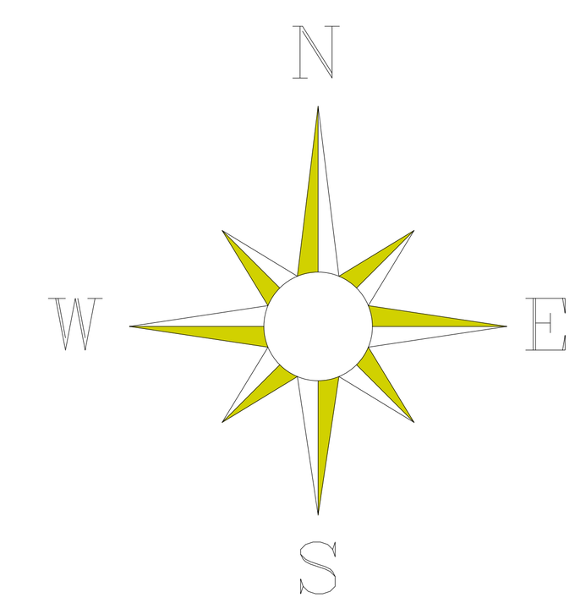


Key:

FL:	Floor level	SHL:	Sill height level
CL:	Ceiling level	HHL:	Head height level
SusCL:	Suspended ceiling level	SPR:	Spring Point
U/S:	Underside level	Arch:	Arch level
DP:	Down pipe	P.Arch:	Pointed Arch level
WP:	Waste pipe		

Door / sliding door	Building line
Inspection cover	Beam
	Window
	Dimension (10.00m)

Av	Air valve	G:	Girth circumference	Sv	Stop valve
Bg	Back gully	Gy	Gully	TCB	Telephone call box
BH	Borehole	Ht.	Height	TTL:	Tree top level
BM	Benchmark	IC	Inspection cover	THL	Threshold level
Boll	Bollard	IFL	Internal floor level	TCB	Telephone call box
Bs	Bus stop	IL	Invert level	TL	Traffic light
BT	British Telecom	Lb	Letter box	THL	Threshold level
Bg	Back Gully	Lp	Lamp Post	Tp	Telegraph post
CL	Cover Level	MG	Multigirth	Ts	Traffic signal
CBX	Control box	MH	Manhole	TT	Tactile paving
CPS	Concrete paving slab	Mkr	Marker post	Twl:	Top of wall level
CTV	Cable TV cover	NVP	No visible pipes	UTL	Unable to lift
Elc	Electric cover	PInv	Pipe invert	WL	Water level
Ep	Electricity post	Pb	Post box	Wm	Water meter
Er	Earth rod	Re	Rodding eye	Wo	Wash out
Fh	Fire hydrant	Sp	Sign post		
Fs	Flagstaff	St	Stop tap		

Road
Drop Kerb
Verge Tarmac
Verge Concrete
Verge Grass
Verge
Tops
Bottoms

Ordnance Survey information is provided for a guide only.
OS BUILDING OUTLINE
OS DETAIL

Station	Easting (m)	Northing (m)	Level (m)
M1	446512.512	298661.122	95.878
M2	446549.736	298671.790	95.121
M3	446488.399	298659.230	96.364
M4	446466.853	298777.154	93.339
M5	446499.803	298778.452	93.025
M6	446479.457	298782.897	93.239
M7	446462.419	298802.786	93.840

REV	DATE	DESCRIPTION OF WORK	SURVEYOR	CHECKED BY
-	--.--.--	-	-	-

MAPMATIC
MEASURED SURVEYS

SETTING OUT M UTILITY SURVEYS M CCTV SURVEYS M CAMERA SURVEYS M FLOOD RISK ASSESSMENT
AERIAL SURVEYS M EARTHWORK CALCULATIONS M MEASURED BUILDING SURVEYS M TOPOGRAPHICAL SURVEYS

Mapmatic, Unit 14, Prime Parkway, Derby, DE1 3QB
Tel: 01332 650 580 www.mapmatic.com Email: info@mapmatic.com

CLIENT
Giles
Stanley Ltd

PROJECT
Land West of Shilton Road
Earl Shilton
Leicester, LE9 7EQ

TITLE
Topographical
Survey

Scale	1: 500@A0	Date	22.05.2025
Drawn	MR	Checked	AW
Level datum	GNSS	Grid orientation	GNSS
Job number	7852	Revision	0
Drawing no.	0001	Sheet	2 of 2

Notes:

All critical measurements should be checked on site prior to design. No liability will be taken for this plan if passed onto 3rd parties. Trees and other survey data may be omitted due to dense vegetation. Some services may have been omitted due to parked vehicles and vegetation. Please note the drainage information has been ascertained by visual inspection from the surface and therefore values are estimated.

This survey has been orientated to the Ordnance Survey (OS) national grid via a Global Navigation Satellite System (GNSS) and the OS Active Network (OS NET). A true OSGB36 coordinate has been established near to the site centre via a transformation using the OSTN15 & OSGM15 transformation models. The survey has been correlated to this point and a further one or more OSGB36 points established to create a true OS bearing for angle orientation. No scale factor has been applied to the survey therefore the coordinates shown are arbitrary and not true OS coordinates.
Please refer to the survey station table to enable establishment of the on-site grid.

RICS ICES

Appendix C

Proposed Site Plan

N

Shilton Rd

1

2

3

Approved Planning Permission Outline: 21/00135/OUT
Reserved Matters Approved 24/00496/REM (140 dwellings)

KEY

Site boundary (5.67ha)

Other land within client's control

Proposed residential development (2.99ha developable area)

Existing pedestrian route

Existing bridleway

Proposed pedestrian route

Existing trees and hedges to be retained

Proposed vegetation

Proposed primary vehicular route

Proposed minor / shared surface vehicular route

FOR ILLUSTRATIVE PURPOSES ONLY

Drawn By S.C.M.	Title Land west of Shilton Rd, Earl Shilton ILLUSTRATIVE SITE LAYOUT - PARCEL 1	Drawing No 25.034/05a	P&DG Planning and Design Group
Approved By D.R.			
Revision Detail / Date Rev. a: minor amendment to layout (S.C.M. 01/09/25)	Scale LINEAR	P and DG accept no responsibility for any unauthorised amendments to drawings and does not permit unauthorised copying of drawings in order that subsequent reproduction of drawings are internally controlled. Copyright P and DG	
	Date 09/25	This drawing should not be scaled for construction purposes	

Appendix D

Severn Trent Water Correspondence & Sewer Records

WONDERFUL ON TAP

SEVERN TRENT

Severn Trent Water Ltd
Oxley Moor Road
Wolverhampton
WV9 5HN

www.stwater.co.uk
network.solutions@severntrent.co.uk

Contact: Michael Taylor
Tel. 07769881839
Reference: 1151815

Matthew Genn
BSP Consulting Ltd
12 Oxford Street
Nottingham
NG1 5BG

23rd June 2025

Dear Matthew

Proposed Development: - 205 dwelling development West Shilton Rd
X-446484 Y-298636

I refer to your 'Development Enquiry Request' for the proposed 205 dwelling development in respect of the above-named site. Please find enclosed the sewer records that are included in the fee together with the Supplementary Guidance Notes (SGN) which refer to surface water disposal from development sites.

Public Sewers in Site – Required Protection

Due to a change in legislation on 1 October 2011 there may be former private sewers on the site which have transferred to the responsibility of Severn Trent Water Ltd, which are not shown on the statutory sewer records, but are in your client's land. These sewers would require protective strips of 3 metres either side of the sewer's centreline that we will not allow to be built over.

Foul Water Drainage

The proposed development for 205 dwellings would create additional flows of approx. 3.2/s 2xdwf gravity flows, a pumped solution we would expect to be approx. 5.5l/s,

The nearest suitable foul sewer is located for a pumped solution is m/h88202 should be possible, there is limited capacity within the network for foul flows, including limited capacity at the downstream pump station, modelling maybe required.

In a change to our previous process, we no longer charge developers for the hydraulic modelling service. We will liaise with you over time with regards to the outcome of our investigations and any impact that may have on the planning status, occupation, or

phasing of the site.
However, while we can provide a brief summary of our findings if you need us to, we will no longer provide the full external capacity assessment report.

In the meantime, the site will be added to our modelling tracker and reviewed regularly until the site can be progressed for sewer modelling. We will only put the modelling request forward, if we are sure a pumped solution is possible and the site will progress , requiring a connection to the public sewer.

We are undergoing a prioritisation process of all investment requirements and emerging risks from growth on our network and treatment works as we build our plan for the coming Asset Management Plan period (2025-2030) and beyond.
We will pass details of your site over for consideration and feed back if anything arises which is of concern. **We will let you know as soon as possible if anything will affect your connection points and timescales, should we need to make representation to the Planning Authority to apply conditions relating to phasing or occupation of the site.** it's more to allow us to understand whether what system improvements will be required as a result of your proposed development drainage scheme.
From the application you have submitted, I am assuming that the development has not been granted planning approval. In the meantime, the site will be added to our modelling tracker and reviewed regularly until the site can be progressed for sewer modelling. I would therefore be grateful if you would forward as soon as possible the following details.

If a gravity connection is possible.
Pumped flows if this is the only option.
Proposed timescales and phase details for the construction.
Planning status

All connections, via new or existing connections are subject to S106 sewer connection applications.
As you have identified another proposed development due south of your site, it would be beneficial, to discuss proposed joint drainage solution, where you may be able to drain by gravity to the southern development, this would also avoid the need for numerous pump stations.

Surface Water Drainage

Under the terms of Section H of the Building Regulations 2000, the disposal of surface water by means of soakaways should be considered as the primary method. If these are found to be unsuitable, satisfactory evidence will need to be submitted. The evidence should be either percolation test results or by the submission of a statement from the SI consultant (extract or a supplementary letter).

WONDERFUL ON TAP

SEVERN TRENT

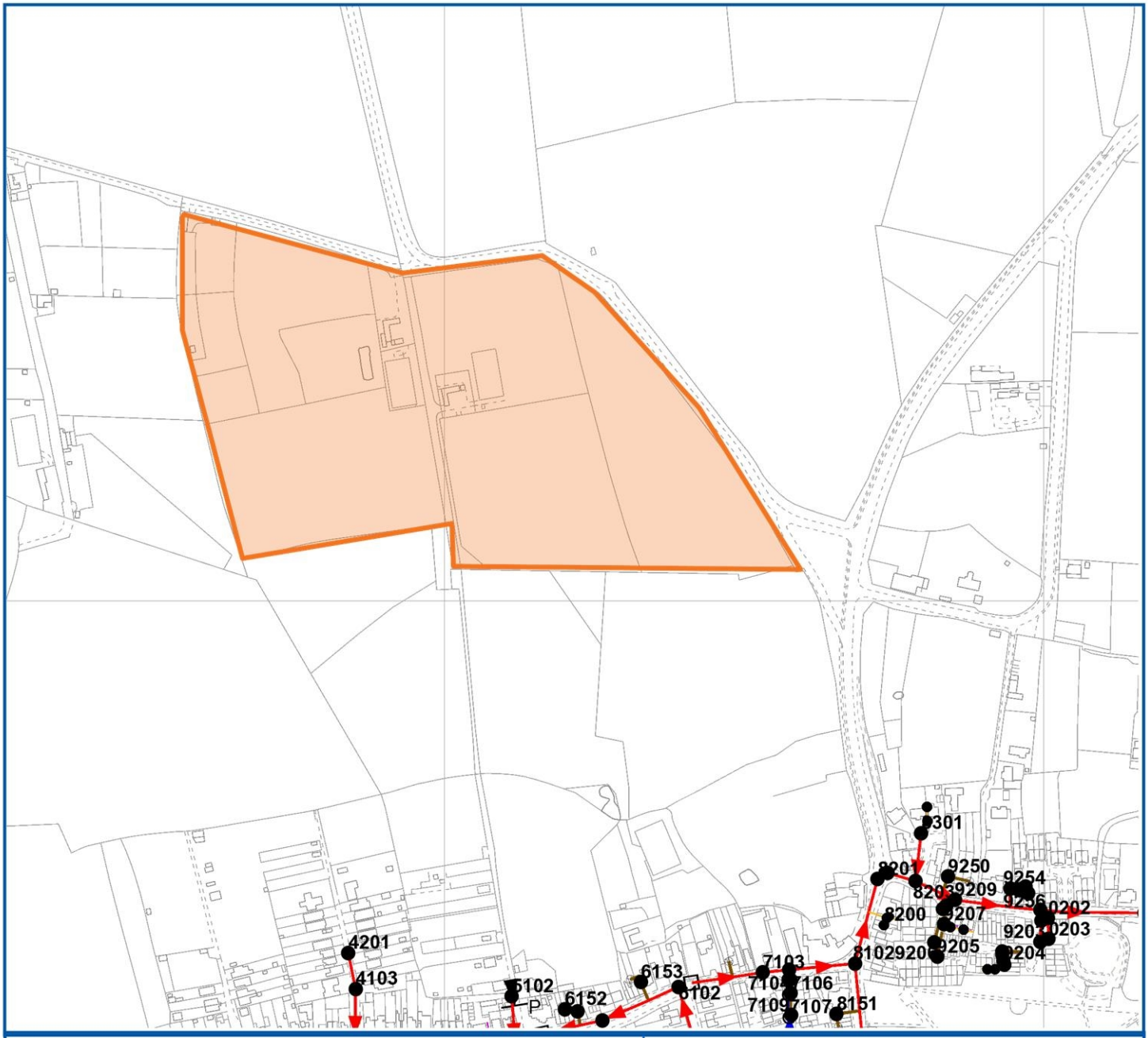
Should Soakaways prove to be unfeasible for the development, then you will need to investigate any local watercourse culverts/ditches or highway drains for surface water discharge, with flows in line with greenfield rates 5l/s/ha to be agreed with the LLFA.

For any new connections (including the re-use of existing connections) to the public sewerage system, the developer will need to submit a Section 106 application form. Our Developer Services department are responsible for handling all new connections enquiries and applications. To contact them for an application form and associated guidance notes please call 0800 7076600 or download from www.stwater.co.uk.

Please quote reference 1151815 in any future correspondence (including e-mails) with STW Limited. Please note that Developer Enquiry responses are only valid for 6 months from the date of this letter.

Yours sincerely

Michael Taylor
Senior Evaluation Technician
Network Solutions



LEGEND

Operational Site

Waste Water Pump
- Transferred Asset
- S24
- S104
- S102
- Null Private
- Null
- None
- Highway Drain
- Adopted Sewer

Storage
- Disposal Site
- Off-Line Waste Water Storage
- On-Line Waste Water Storage
- Wet Well

Waste Water Process Structure
- Sewage Treatment Point
- Sewage Treatment Structure
- Sludge Treatment Point
- Sludge Treatment Structure

Manhole
- Foul Bifurcation Manhole
- Combined Bifurcation Manhole
- Surface Water Bifurcation Manhole
- Dual Manhole
- Foul Single Manhole
- Combined Single Manhole
- Surface Water Single Manhole
- Twin Manhole
- Foul Adopted Manhole
- Combined Adopted Manhole
- Surface Adopted Manhole
- Transferred Manhole
- Unsurveyed Manhole

Gravity Sewer Pipe
- Foul Gravity Sewer
- Combined Gravity Sewer
- Surface Water Gravity Sewer
- S104 Surface Water Gravity Sewer
- S104 Combined Gravity Sewer
- S104 Foul Gravity Sewer
- Private Surface Water Gravity Sewer
- Private Combined Gravity Sewer
- Private Foul Gravity Sewer
- Surface Water Unsurveyed Pipe
- Combined Unsurveyed Pipe
- Foul Unsurveyed Pipe
- Transferred Surface Water Sewer
- Transferred Combined Sewer
- Transferred Foul Sewer
- Disposal Pipe
- Overflow Pipe
- Culverted Water Course
- Waste Internal Site Pipe
- Sewer Service Connection
- Gravity Sewer Others

Pressure Sewer Pipe
- Surface Water Pressure Sewer
- Combined Pressure Sewer
- Foul Pressure Sewer
- S104 Surface Water Pressure Sewer
- S104 Combined Pressure Sewer
- S104 Foul Pressure Sewer
- Private Surface Water Pressure Sewe
- Private Combined Pressure Sewer
- Private Foul Pressure Sewer
- Surface Water Vacuum Sewer
- Foul Vacuum Sewer
- Combined Vacuum Sewer
- S104 Surface Water Vacuum Sewer
- S104 Combined Vacuum Sewer
- S104 Foul Vacuum Sewer
- Private Surface Water Vaccum Sewer
- Private Combined Vacuum Sewer
- Private Foul Vacuum Sewer
- Surface Water Siphon
- Combined Siphon
- Foul Siphon
- Private Surface Water Siphon
- Private Combined Siphon
- Private Foul Siphon
- S104 Surface Water Siphon
- S104 Combined Siphon
- S104 Foul Siphon
- Surface Water Unsurveyed Pipe
- Combined Unsurveyed Pipe
- Foul Unsurveyed Pipe
- Disposal Pipe

Service Pipe
- Surface Water Lateral Drain
- Combined Lateral Drain
- Foul Lateral Drain
- S104 Surface Water Lateral Drain
- S104 Combined Lateral Drain
- S104 Foul Lateral Drain
- Private Surface Water Lateral Drain
- Private Combined Lateral Drain
- Private Foul Lateral Drain
- Transferred Surface Water Lateral Dra
- Transferred Combined Lateral Drain
- Transferred Foul Lateral Drain

Ancillary
- Balancing Lagoon
- Grease Trap
- Interceptor
- Screen

Chamber
- Flushing Chamber
- Scalaway
- Overflow

Fitting
- Blind Shaft
- Facility Connector
- Head Node
- Lamphole
- Sewerage Air Valve
- Sewerage Chemical Injection Point
- Sewerage Hatch Box
- Sewerage Pressure Washout
- Vent Column
- Waste Water Outfall

Control Valve
- Hydrobrake
- Penstock
- Sewerage Isolation Valve
- Sewerage Non Return Valve

Manhole Annotation
- Print500mLine

Severn Trent Water Limited
Asset Data Management
PO Box 5344
Coventry
CV3 9FT
Telephone: 0345 601 6616

SEWER RECORD

O/S Map Scale: 1:5,000

This map is centred upon:

Date of Issue: 23-06-25

X: 446606.51 **Y:** 298570.08

Disclaimer Statement:

1 Do not scale off this Map.

2 This plan and any information supplied with it is furnished as a general guide, is only valid at the date of issue and no warranty as to its correctness is given or implied. In particular this plan and any information shown on it must not be relied upon in the event of any development or works (including but not limited to excavations) in the vicinity of SEVERN TRENT WATER assets or for the purposes of determining the suitability of a point of connection to the sewerage or distribution systems.

3 On 1 October 2011 most private sewers and private lateral drains in Severn Trent Water's sewerage area, which were connected to a public sewer as at 1 July 2011, Transferred to the ownership of Severn Trent Water and became public sewers and public lateral drains. A further transfer takes place on 1 October 2012. Private pumping stations, which form part of these sewers or lateral drains, will transfer to ownership of Severn Trent Water on or before 1 October 2016. Severn Trent Water does not possess complete records of these assets. These assets may not be displayed on the map.

5 Ordnance Survey licence number: **AC0000808122**

Sewer Node Sewer Pipe Data

Reference	Cover Level	Invert Level Upstream	Invert Level Downstream	Purpose	Material	Pipe Shape	Max Size	Min Size	Gradient	Year Laid
SP46976902	120.2099	117.57	115.94	S	VC	C	150	<UNK>	52.38	31/12/1899 00:00:00
SP46987109	120.18	118.61	118.19	S	VC	C	225	<UNK>	29.79	31/12/1899 00:00:00
SP47981001	118.01	116.3	109.98	F	VC	C	225	<UNK>	11.63	31/12/1899 00:00:00
SP46988204	<UNK>	<UNK>	<UNK>	C	VC	C	100	<UNK>	<UNK>	31/01/2019 00:00:00
SP47980005	118.44	116.92	116.91	C	VC	C	225	<UNK>	608	31/12/1899 00:00:00
SP46987105	119.55	117.39	116.78	C	VC	C	225	<UNK>	92.16	31/12/1899 00:00:00
SP46977905	119.8659	118.55	117.86	S	VC	C	150	<UNK>	33.46	31/12/1899 00:00:00
SP46989208	117.0299	116.24	115.61	F	VC	C	150	<UNK>	6.73	31/12/1899 00:00:00
SP46986004	0	0	0	F	<UNK>	<UNK>	0	0	0	11/03/2010 00:00:00
SP46976903	120.0999	117.57	114.83	C	VC	C	225	<UNK>	35.81	31/12/1899 00:00:00
SP46979902	119.5899	118.56	112.42	C	VC	C	225	<UNK>	21.3	31/12/1899 00:00:00
SP46979901	119.8199	118.27	117.81	C	VC	C	225	<UNK>	68.2	31/12/1899 00:00:00
SP46988202	115.5599	113.96	113.68	C	VC	C	225	<UNK>	85.86	31/12/1899 00:00:00
SP46985102	118.44	117.79	<UNK>	C	VC	C	150	<UNK>	0	31/12/1899 00:00:00
SP46978906	49.49	47.74	47.583	F	U	U	150	<UNK>	114.39	05/11/2007 00:00:00
SP46977903	120.3	118.7	118.45	F	VC	C	225	<UNK>	49.48	31/12/1899 00:00:00
SP46972901	117.9199	114.27	114.01	C	VC	C	225	<UNK>	220.88	31/12/1899 00:00:00
SP47980101	119.267	118.04	117.767	F	VC	C	150	0	37.55	31/12/1899 00:00:00
SP46986001	121.18	118.57	117.6	C	VC	C	225	<UNK>	89.82	31/12/1899 00:00:00
SP46979903	49.0999	47.284	47.029	F	U	U	150	<UNK>	19.65	05/11/2007 00:00:00
SP46987108	119.5599	118.18	117.92	S	VC	C	225	<UNK>	6.54	31/12/1899 00:00:00
SP46971901	117.7799	114.66	114.28	C	VC	C	225	<UNK>	220.58	31/12/1899 00:00:00
SP47980002	118.1699	116.9	116.81	C	VC	C	225	<UNK>	499.33	31/12/1899 00:00:00
SP46985001	120.6999	119.18	118.64	C	VC	C	225	<UNK>	106.59	31/12/1899 00:00:00
SP47980007	119.5999	118.12	117.12	S	U	C	150	0	23.6	31/12/1899 00:00:00
SP47980003	<UNK>	<UNK>	116.36	F	VC	<UNK>	<UNK>	<UNK>	0	31/12/1899 00:00:00
SP46985002	0	0	0	F	<UNK>	<UNK>	0	0	0	11/03/2010 00:00:00
SP46988001	120.29	118.09	118.01	C	VC	C	225	<UNK>	579	31/12/1899 00:00:00
SP46987111	120.66	118.87	118.41	F	VC	C	<UNK>	<UNK>	39.78	31/12/1899 00:00:00
SP46989207	118.2799	115.92	115.41	F	VC	C	150	<UNK>	31.61	31/12/1899 00:00:00
SP46978904	119.289	117.11	114.34	C	VC	C	300	<UNK>	31.65	31/12/1899 00:00:00
SP46989253	0	0	0	C	U	U	0	0	0	31/12/1899 00:00:00
SP46987104	119.51	117.88	117.42	C	VC	C	225	<UNK>	15.2	31/12/1899 00:00:00
SP47980203	118.43	116.84	116.02	C	VC	C	150	<UNK>	20.73	31/12/1899 00:00:00
SP46989250	<UNK>	<UNK>	<UNK>	F	VC	C	150	<UNK>	0	31/12/1899 00:00:00
SP46985100	<UNK>	<UNK>	<UNK>	F	P	U	100	<UNK>	<UNK>	31/12/1899 00:00:00
SP46988151	<UNK>	<UNK>	<UNK>	F	VC	C	150	<UNK>	0	31/12/1899 00:00:00
SP46988301	114.91	113.88	113.83	C	VC	C	225	<UNK>	823.8	31/12/1899 00:00:00
SP46989204	118.3899	116.52	115.67	C	VC	C	150	<UNK>	21.21	31/12/1899 00:00:00
SP46979904	48.886	118.27	117.81	C	VC	C	225	0	53.26	31/12/1899 00:00:00
SP46978903	119.47	117.29	117.16	C	VC	C	225	<UNK>	156.92	31/12/1899 00:00:00

Sewer Node Sewer Pipe Data

Reference	Cover Level	Invert Level Upstream	Invert Level Downstream	Purpose	Material	Pipe Shape	Max Size	Min Size	Gradient	Year Laid
SP46989203	117.6299	115.6	115.6	C	VC	C	225	<UNK>	0	31/12/1899 00:00:00
SP46988002	120.5899	118.57	118.15	C	VC	C	225	<UNK>	92.88	31/12/1899 00:00:00
SP47980006	118.25	0	0	C	<UNK>	<UNK>	0	0	0	31/12/1899 00:00:00
SP46974903	120.04	118.7	117.85	F	VC	C	225	<UNK>	24.82	31/12/1899 00:00:00
SP47980010	118.4869	117.12	117.066	S	U	C	225	0	140.2	31/12/1899 00:00:00
SP46989202	117.5199	112.01	111.57	C	VC	C	225	<UNK>	195.48	31/12/1899 00:00:00
SP46984103	119.26	118.24	117.01	C	VC	C	150	<UNK>	38.21	31/12/1899 00:00:00
SP46989252	0	0	0	C	U	U	0	0	0	31/12/1899 00:00:00
SP46977904	120.5299	118.66	117.62	S	VC	C	150	<UNK>	30.66	31/12/1899 00:00:00
SP47980009	127.9499	117.767	117.086	F	VC	C	150	0	35.26	31/12/1899 00:00:00
SP46977901	120.051	118.43	118.28	F	VC	C	225	<UNK>	68	31/12/1899 00:00:00
SP47980102	119.618	118.49	117.708	F	VC	C	<UNK>	<UNK>	26.02	31/12/1899 00:00:00
SP46987110	121.04	119.49	119.11	S	VC	C	225	<UNK>	98.97	31/12/1899 00:00:00
SP46988101	120.3	117.98	117.19	C	VC	C	225	<UNK>	114.49	31/12/1899 00:00:00
SP46974902	119.3899	117.81	115.82	F	VC	C	225	<UNK>	22.66	31/12/1899 00:00:00
SP46988203	116.54	113.68	113.31	C	VC	C	225	<UNK>	97.97	31/12/1899 00:00:00
SP46984201	118.73	118.33	118.24	C	VC	C	150	<UNK>	339.89	31/12/1899 00:00:00
SP46989201	116.83	113.66	113.31	F	VC	C	225	<UNK>	24.57	31/12/1899 00:00:00
SP46986101	119.54	118.01	117.71	C	VC	C	225	<UNK>	170.67	31/12/1899 00:00:00
SP46985101	119.43	117.41	117.21	C	VC	C	225	<UNK>	190	31/12/1899 00:00:00
SP47980004	<UNK>	<UNK>	117.1	C	<UNK>	<UNK>	<UNK>	<UNK>	0	31/12/1899 00:00:00
SP46982002	<UNK>	<UNK>	<UNK>	C	<UNK>	<UNK>	<UNK>	<UNK>	0	31/12/1899 00:00:00
SP46987103	119.75	117.49	117.41	C	VC	C	225	<UNK>	276.13	31/12/1899 00:00:00
SP46982001	<UNK>	<UNK>	114.68	C	<UNK>	<UNK>	<UNK>	<UNK>	0	31/12/1899 00:00:00
SP46983101	<UNK>	<UNK>	<UNK>	C	<UNK>	<UNK>	<UNK>	<UNK>	0	31/12/1899 00:00:00
SP46988102	119.29	116.73	114.14	C	VC	C	225	<UNK>	28.28	31/12/1899 00:00:00
SP46976901	119.79	118.25	115.6	F	VC	C	225	<UNK>	26.37	31/12/1899 00:00:00
SP46986151	<UNK>	<UNK>	<UNK>	F	VC	C	150	<UNK>	0	31/12/1899 00:00:00
SP46986102	119.7699	118.41	118.256	C	VC	C	225	<UNK>	177.86	31/12/1899 00:00:00
SP46987002	121.6299	119.89	119.47	C	VC	C	225	<UNK>	113.19	31/12/1899 00:00:00
SP46984102	118.9599	117.17	116.82	C	VC	C	225	<UNK>	160.23	31/12/1899 00:00:00
SP46989256	0	0	0	C	U	U	0	0	0	31/12/1899 00:00:00
SP46987107	120.62	119.05	118.65	S	VC	C	225	<UNK>	47.53	31/12/1899 00:00:00
SP46974904	117.97	116.26	113.53	F	VC	C	225	<UNK>	20.18	31/12/1899 00:00:00
SP46978908	49.2529	47.431	47.284	F	U	U	150	<UNK>	111.7	18/06/2010 00:00:00
SP46989001	119.23	117.44	116.94	C	VC	C	225	<UNK>	74.4	31/12/1899 00:00:00
SP46986002	121.65	119.51	118.62	C	VC	C	225	0	86.13	31/12/1899 00:00:00
SP46986005	0	0	0	F	VC	<UNK>	0	0	0	11/03/2010 00:00:00
SP47980001	118.5699	116.81	113.59	C	VC	C	225	<UNK>	44.2	31/12/1899 00:00:00
SP46989254	0	0	0	C	U	U	0	0	0	31/12/1899 00:00:00
SP46989206	119.3	117.51	115.99	F	VC	C	150	<UNK>	18.99	31/12/1899 00:00:00
SP46987106	120.04	118.4	117.96	F	VC	C	<UNK>	<UNK>	28.45	31/12/1899 00:00:00

Sewer Node Sewer Pipe Data

Reference	Cover Level	Invert Level Upstream	Invert Level Downstream	Purpose	Material	Pipe Shape	Max Size	Min Size	Gradient	Year Laid
SP46977902	119.9599	117.81	117.58	S	VC	C	150	<UNK>	48.61	31/12/1899 00:00:00
SP46978905	120.593	118.6	<UNK>	C	VC	C	225	<UNK>	0	31/12/1899 00:00:00
SP46989209	116.7099	113.25	112.02	C	VC	C	225	<UNK>	58.19	31/12/1899 00:00:00
SP46986003	0	0	0	F	VC	<UNK>	0	0	0	11/03/2010 00:00:00
SP46987001	121.61	119.45	118.6	C	VC	C	225	<UNK>	129.93	31/12/1899 00:00:00
SP47980201	116.47	111.56	111.46	C	VC	C	225	<UNK>	361.2	31/12/1899 00:00:00
SP46978907	49.4539	47.583	47.431	F	U	U	150	<UNK>	115.13	05/11/2007 00:00:00
SP46977907	<UNK>	<UNK>	<UNK>	C	VC	C	225	<UNK>	0	31/12/1899 00:00:00
SP46978902	119.9199	117.78	117.32	C	VC	C	225	<UNK>	115.52	31/12/1899 00:00:00
SP46977906	119.8119	118.81	118.5	F	VC	C	150	<UNK>	97	31/12/1899 00:00:00
SP46989205	120.29	118.09	116.99	F	VC	C	150	<UNK>	25.15	31/12/1899 00:00:00
SP46986152	0	<UNK>	<UNK>	F	<UNK>	<UNK>	<UNK>	<UNK>	0	31/12/1899 00:00:00
SP46988200	<UNK>	<UNK>	<UNK>	C	VC	C	150	<UNK>	<UNK>	31/01/2019 00:00:00
SP46989002	119.79	118.07	117.47	C	VC	C	225	<UNK>	47.98	31/12/1899 00:00:00
SP46988201	115.8199	114.14	114	C	VC	C	225	<UNK>	73.57	31/12/1899 00:00:00
SP46986153	<UNK>	<UNK>	<UNK>	F	VC	C	100	<UNK>	0	31/12/1899 00:00:00
SP47980202	117.79	115.97	115.71	C	VC	C	150	<UNK>	20.73	31/12/1899 00:00:00
SP47980103	119.9	118.7	118.12	S	U	C	150	0	20.16	31/12/1899 00:00:00
SP46984101	118.8	116.82	<UNK>	C	VC	C	225	<UNK>	0	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	C	<UNK>	<UNK>	<UNK>	<UNK>	<UNK>	11/01/2023 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	18/02/2021 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	10/02/2021 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	26/03/2021 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	U	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	12/03/2024 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	05/05/2021 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	10/02/2021 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	10/02/2021 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	18/02/2021 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	13/02/2022 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	30/01/2020 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	18/02/2021 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	U	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	31/12/1899 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	C	VC	<UNK>	<UNK>	<UNK>	<UNK>	08/10/2021 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	22/03/2024 00:00:00
<UNK>	<UNK>	<UNK>	<UNK>	F	VC	<UNK>	<UNK>	<UNK>	<UNK>	18/02/2021 00:00:00

SUPPLEMENTARY GUIDANCE NOTES RELATING TO DISPOSAL OF SURFACE WATER

Introduction

The purpose of this guidance note is to provide advice to applicants when completing the surface water drainage design for a new development, both for Greenfield and Brownfield sites. This does not affect foul drainage disposal which should be discussed with Severn Trent as early as possible to ensure additional flows can be accommodated without undue delay to the development.

Lead Local Flood Authority (LLFA) Consultation

Since April 2015, the LLFA have assumed the role of being a statutory consultee in the planning process for developments of 10 dwellings or more; or equivalent non-residential and/or mixed development. The LLFAs role is vital to ensure that surface water disposal on new development is adequately assessed so that the local planning authority can satisfy themselves that drainage proposals are satisfactory and to make sure, through the use of planning conditions or planning obligations, that there are clear arrangements in place for future maintenance of sustainable drainage systems (SuDS) over the lifetime of the development. This will also ensure surface water disposal aligns with local planning policies, flood risk strategies and national policies, such as the National Planning Policy Framework (NPPF).

It is strongly recommend that the LLFA are involved in early pre-application discussions when the development of a site is initially being considered. Pre-application discussions will help to ensure that SuDS are appropriately considered ahead of or as part of preliminary development layouts, and that they are fully integrated into the final development layout. Whilst Severn Trent are willing to advise on sewerage availability this does to negate the planning requirement relating to adequacy of SuDS on new development.

SuDS Hierarchy

Severn Trent is fully supportive of the fundamental SuDS principle that priority should be given to managing surface water as close to source as possible. In accordance with national standards and guidance a sequential series of checks should be undertaken to ensure the relevant SuDS features are being proposed whereby (in order of priority) rainwater re-use, infiltration to ground and controlled discharge to a water body are properly considered ahead of any controlled connection to a culverted watercourse/other drainage system or public surface water sewer.

A controlled connection to a public combined/foul sewer would only be considered under rare exceptional circumstances where all other options have been completely exhausted. Acceptance of surface water into a combined sewer is not only unsustainable because of the need to convey/treat rainwater but is also takes away existing capacity which could constraint the connection of foul flows on future development. It is also possible that connection of additional surface water flows will require capacity upgrades to the existing sewerage system which may delay development.

Connection to a Public Sewer

Whilst Severn Trent will be able to provide advice on potential public surface water sewer connection options, it is essential that a developer contacts the LLFA as early as possible to discuss surface water disposal as they will be able to provide guidance on surface water flood risk policy which may influence SuDS requirements. It is strongly recommended that LLFA discussions take place before contacting Severn Trent. Where the outcome of LLFA discussions concludes that a controlled discharge to the public sewerage system is the only viable option then Severn Trent would be pleased to discuss sewer connection options, satisfied that the LLFA have been consulted in line with their surface water management role and in their capacity as statutory consultee.

Evidence must be provided to demonstrate why the sequential SuDS checks have concluded that a connection to the public sewer is required. This must include a Site Investigation Report including percolation test data/graphs/calculations/results together with relevant correspondence with the LLFA.

Design Standards

Surface water disposal design should consider the interactions between the adoptable sewer design criteria based on a 30 year design storm (outlined in 'Sewers For Adoption') and the "Non-statutory technical standards for SuDS" requirement to restrict discharge from a site up to and including the 1 in 100 year critical storm event plus an allowance for climate change as required by the LLFA.

For Greenfield development, the peak runoff rate should never exceed the peak pre-development run-off rates/volumes for the same rainfall event irrespective of the design storm duration consistent with the national non-statutory technical standards. For developments which were previously developed (Brownfield), the peak runoff rate must be as close as reasonably practicable to the greenfield runoff rate from the development for the same rainfall event, but should never exceed the rate of discharge from the development prior to redevelopment again for the same rainfall event. This requirement to remove pre-development surface water discharges to the sewerage system will help remove capacity constraints and aid future development.

To establish the pre-development run-off rates a detailed existing drainage survey will be required indicating pipe locations including sizes and levels, impermeable area connectivity to each pipe and topographical information to support existing drainage assumptions. Photographs of the existing buildings and surface features should be provided and where necessary a CCTV sewer survey should be provided to support the drainage survey to demonstrate connectivity.

In line with 'Sewers for Adoption', the drainage system must be designed so that, unless an area is designated to hold and/or convey water as part of the design, flooding does not occur on any part of the site for a 1 in 30 year rainfall event. For higher storm return periods the drainage system must be designed so that, unless an area is designated to hold and/or convey water as part of the design, flooding does not occur during a 1 in 100 year rainfall event in any part of: a building (including a basement); or in any utility plant susceptible to water (e.g. pumping station, electricity substation, water booster station) within the development.

Small Developments

Whilst developments of fewer than 10 dwellings (or their equivalent) are excluded from the post April 2015 planning requirements the underlying principles regarding sustainable surface water management are still valid. The collective impacts of surface water discharges from smaller developments can have an adverse impact on flood risk, especially in smaller rural catchments where smaller sewerage systems are more susceptible to increases in surface water inflow. On small developments infiltration to ground and peak flow attenuation must be considered to mitigate flood risk in the community but where a sewer connection is envisaged then the developer is recommended to discuss surface water disposal options with Severn Trent as early as possible.

Contact

For further assistance please contact our Network Solutions team via:
network.solutions@severntrent.co.uk

Appendix E

Proposed Drainage Strategy Plan, Supporting Calculations & Maintenance Records

ICP SUDS Mean Annual Flood

Input

Return Period (years)	1	Soil	0.450
Area (ha)	5.700	Urban	0.000
SAAR (mm)	700	Region Number	Region 4

Results l/s

QBAR Rural	25.0
QBAR Urban	25.0
Q1 year	20.8
Q1 year	20.8
Q30 years	49.1
Q100 years	64.4