

Surface water and other sources of flooding

Use the [long term flood risk service](#) to find out about the risk of flooding from:

- surface water
- ordinary watercourses
- reservoirs

Or you can contact your Lead Local Flood Authority for further information.

Your Lead Local Flood Authority is West Sussex County Council

For information about sewer flooding, contact the relevant water company for the area.

About the models used

Model name: Hassocks Modelling 2013

Scenario(s): undefended fluvial

Date: 2013

Model name: Hassocks Climate Change Allowances 2016

Scenario(s): undefended climate change fluvial

Date: 2016

This model contains the most relevant data for your area of interest.

Terminology used

Annual exceedance probability (AEP)

This refers to the probability of a flood event occurring in any year. The probability is expressed as a percentage. For example, a large flood which is calculated to have a 1% chance of occurring in any one year, is described as 1% AEP.

Metres above ordnance datum (mAOD)

All flood levels are given in metres above ordnance datum which is defined as the mean sea level at Newlyn, Cornwall.

Flood map for planning (rivers and the sea)

Your selected location is in flood zone 3.

Flood zone 3 shows the area at risk of flooding for an undefended flood event with a:

- 0.5% or greater probability of occurring in any year for flooding from the sea
- 1% or greater probability of occurring in any year for fluvial (river) flooding

Flood zone 2 shows the area at risk of flooding for an undefended flood event with:

- between a 0.1% and 0.5% probability of occurring in any year for flooding from the sea
- between a 0.1% and 1% probability of occurring in any year for fluvial (river) flooding

It's important to remember that the flood zones on this map:

- refer to the land at risk of flooding and do not refer to individual properties
- refer to the probability of river and sea flooding, ignoring the presence of defences
- do not take into account potential impacts of climate change

The flood zones are not currently being updated. The last update was in November 2023. Some of the flood zones may have changed, however all source data is included in the models below.



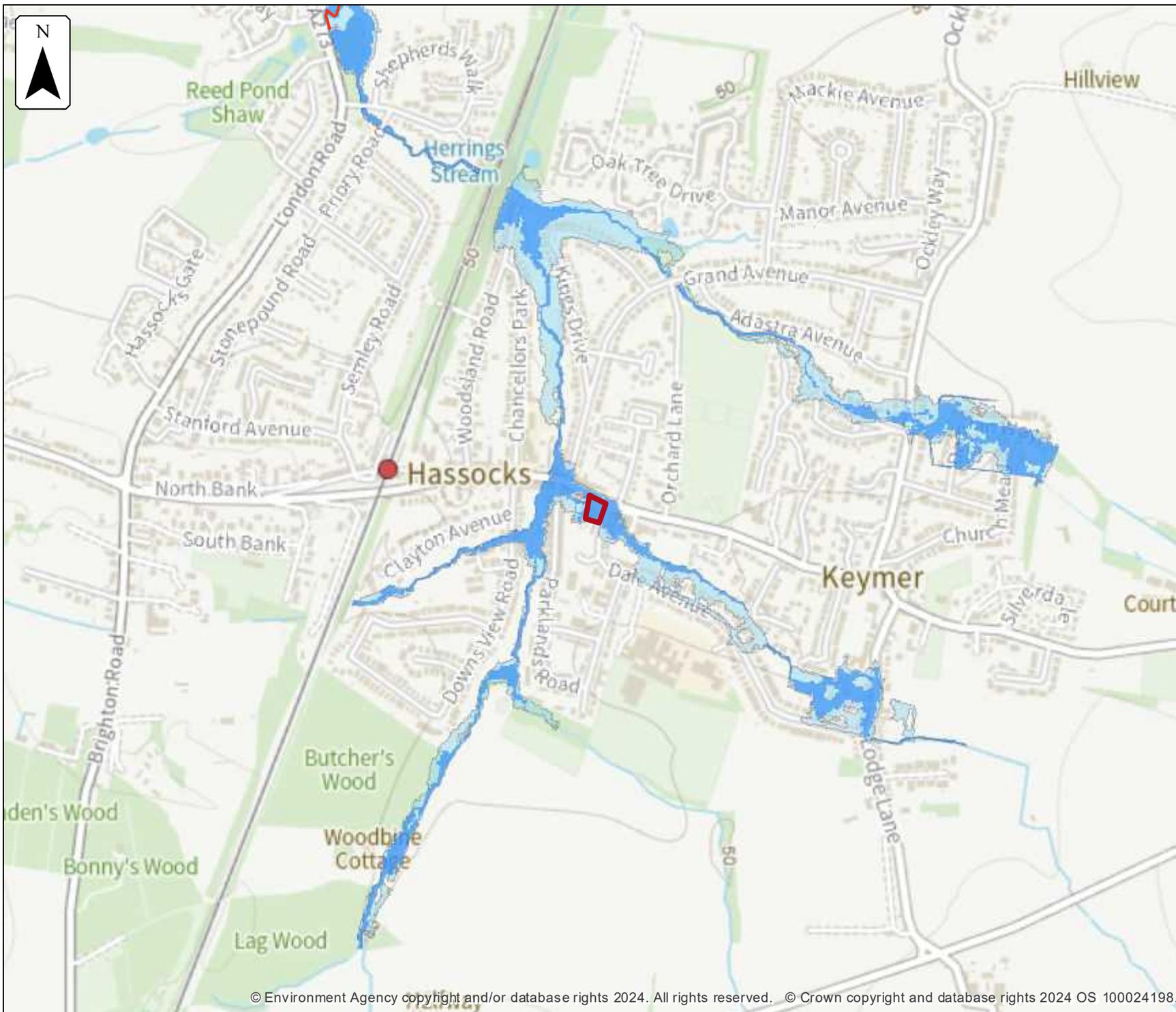
Flood map for planning

Location (easting/northing)
530814/115453

Scale
1:10,000

Created
27 Jun 2024

-  Selected area
-  Main river
-  Flood zone 3
-  Flood zone 2



Modelled data

This section provides details of different scenarios we have modelled and includes the following (where available):

- outline maps showing the area at risk from flooding in different modelled scenarios

Climate change

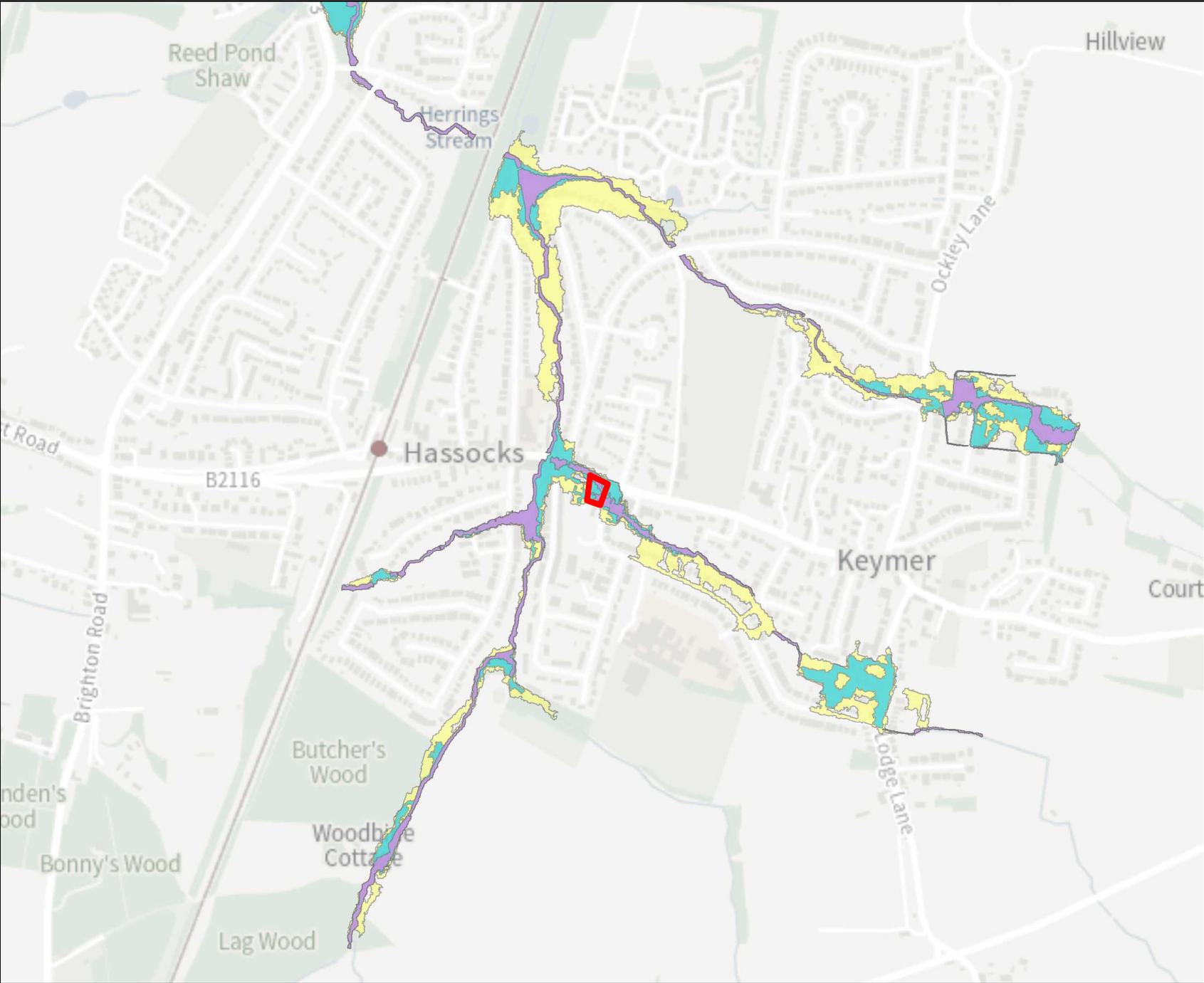
The climate change data included in the models may not include the latest [flood risk assessment climate change allowances](#). Where the new allowances are not available you will need to consider this data and factor in the new allowances to demonstrate the development will be safe from flooding.

The Environment Agency will incorporate the new allowances into future modelling studies. For now, it's your responsibility to demonstrate that new developments will be safe in flood risk terms for their lifetime.

Modelled scenarios

The following scenarios are included:

- Undefined modelled fluvial: risk of flooding from rivers where there are no flood defences
- Undefined climate change modelled fluvial: risk of flooding from rivers where there are no flood defences, including estimated impact of climate change

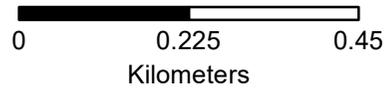


Legend

-  Site Boundary
-  5% AEP (Undefended Fluvial)
-  1% AEP (Undefended Fluvial)
-  0.1% AEP (Undefended Fluvial)

Annual Exceedance Probability (AEP) The probability of a flood of a particular magnitude, or greater occurring in any given year.

Scale: 1:10,000



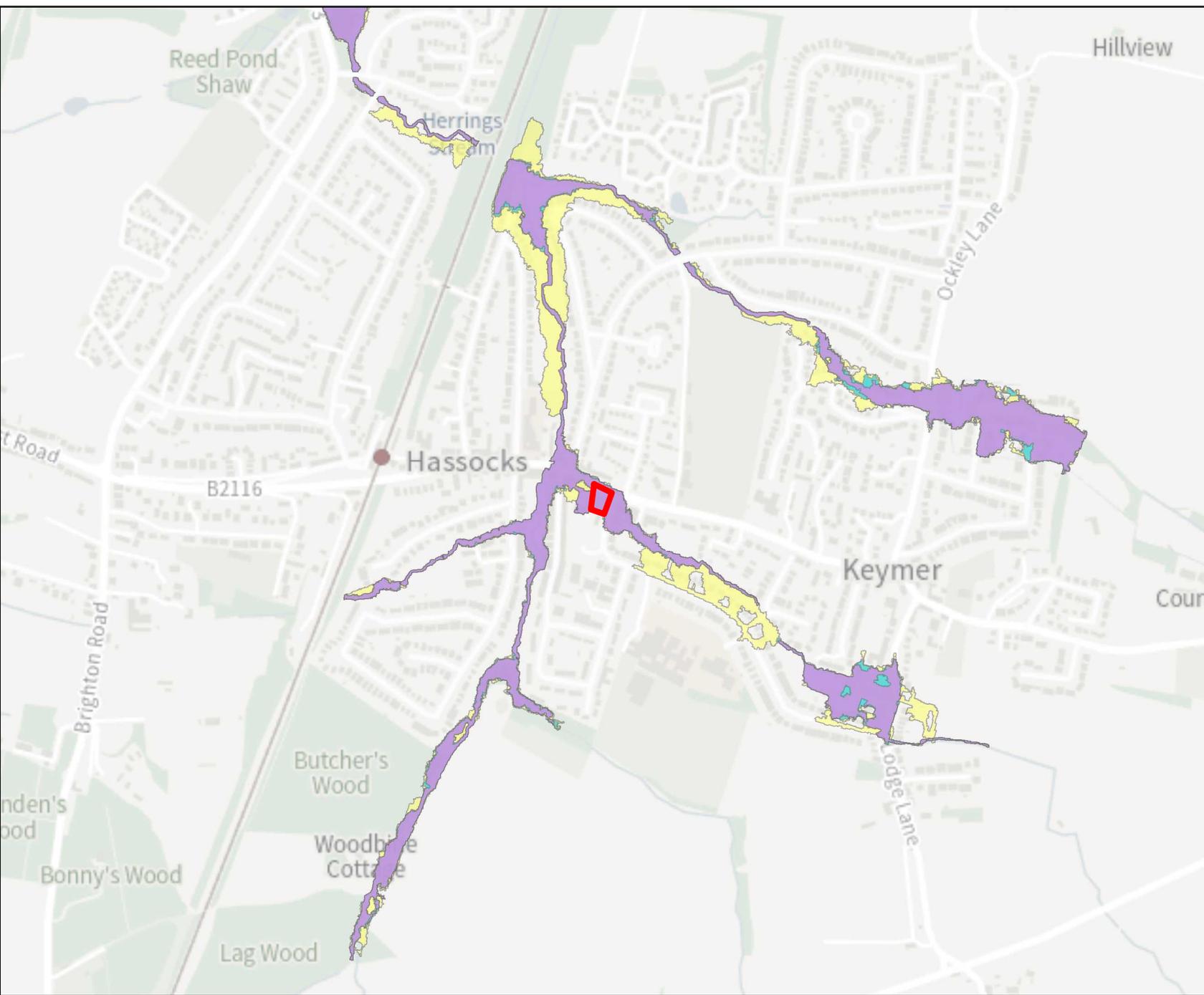


Legend

-  Site Boundary
-  1% AEP+CC (35%) (Undefined Fluvial)
-  1% AEP+CC (45%) (Undefined Fluvial)
-  1% AEP+CC (105%) (Undefined Fluvial)

Annual Exceedance Probability (AEP) The probability of a flood of a particular magnitude, or greater occurring in any given year.

Scale: 1:10,000



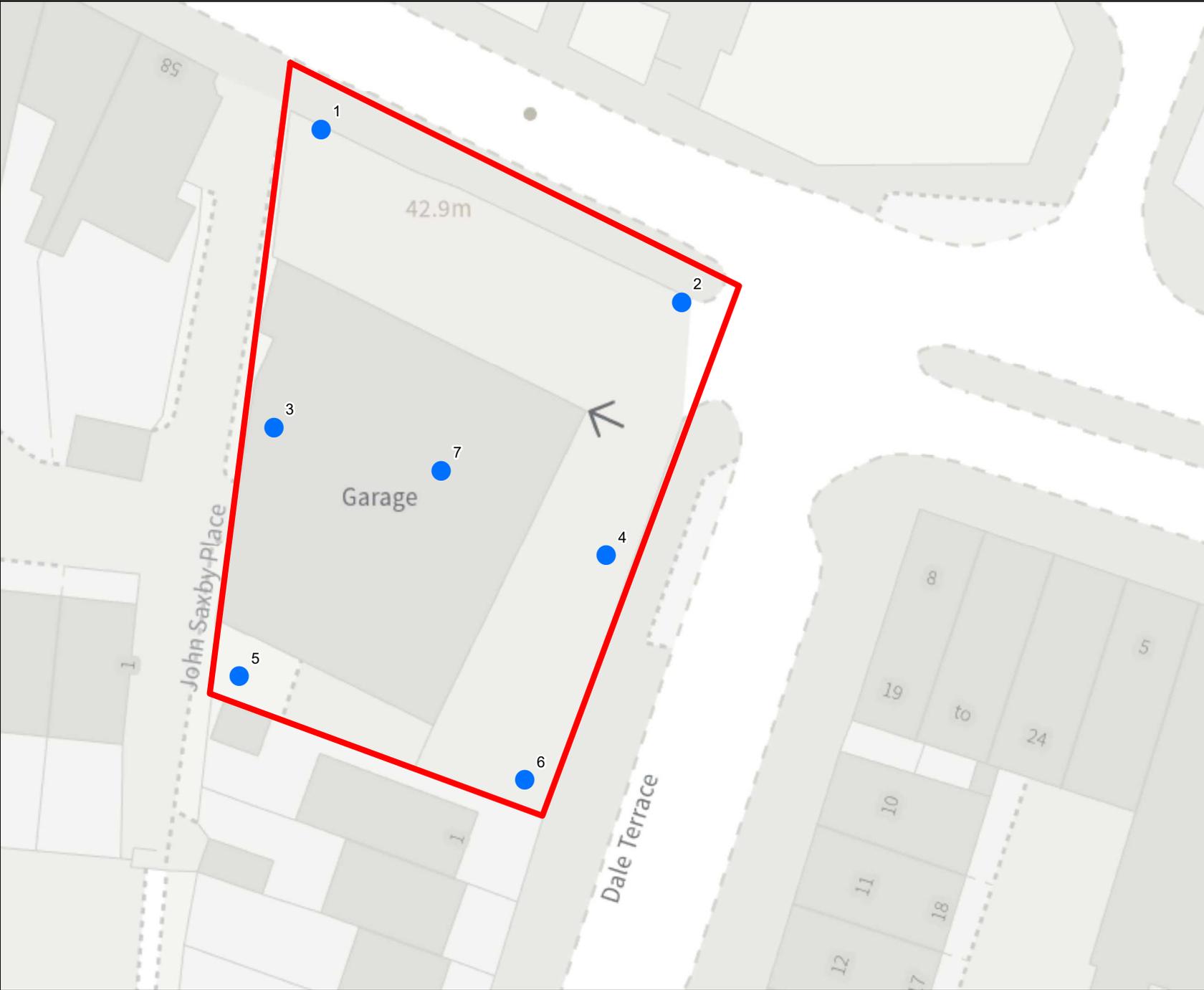
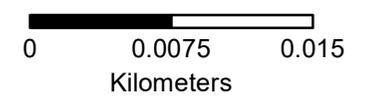


Legend

-  Site Nodes
-  Site Boundary

Annual Exceedance Probability (AEP) The probability of a flood of a particular magnitude, or greater occurring in any given year.

Scale: 1:400



Product 4 Flood Risk Data Requested by: Andrew Keen

Site: 60 Keymer Road, Hassocks, West Sussex, BN6 8AR

Table 1: Water Levels: Fluvial Undefended

Node Ref	NGR		Modelled Flood Levels in Metres AOD					
			Undefended Annual Exceedance Probability					
	Eastings	Northings	5%	1%	1%+CC (35%)	1%+CC (45%)	1%+CC (105%)	0.1%
1	530806	115478	-	42.61	42.63	42.63	42.65	42.64
2	530832	115465	-	43.15	43.18	43.18	43.20	43.20
3	530802	115456	-	43.26	43.27	43.28	43.29	43.29
4	530827	115446	43.22	43.30	43.36	43.37	43.42	43.41
5	530800	115438	-	43.36	43.39	43.40	43.42	43.41
6	530821	115430	-	43.39	43.43	43.46	43.49	43.48
7	530815	115453	-	43.28	43.32	43.33	43.37	43.36

Table 5: Water Depths: Fluvial Undefended

Node Ref	NGR		Modelled Flood Levels in Metres AOD					
			Undefended Annual Exceedance Probability					
	Eastings	Northings	5%	1%	1%+CC (35%)	1%+CC (45%)	1%+CC (105%)	0.1%
1	530806	115478	-	0.01	0.02	0.03	0.04	0.04
2	530832	115465	-	0.04	0.06	0.07	0.09	0.08
3	530802	115456	-	0.01	0.01	0.01	0.02	0.02
4	530827	115446	0.01	0.10	0.16	0.17	0.22	0.21
5	530800	115438	-	0.04	0.06	0.07	0.09	0.09
6	530821	115430	-	0.01	0.03	0.06	0.08	0.08
7	530815	115453	-	0.03	0.06	0.07	0.11	0.10

All levels taken from: Hassocks Modelling 2013 and Hassocks Climate Change Allowances 2016, completed by JBA Consulting.

Produced on: 27/06/2024

*** Climate Change allowances for this model only show the superseded 20% increase in flows. The current allowances should be checked here: <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>.**

**** The flood risk data provided is based on existing EA hydraulic models for existing 0.5% annual probability events with an allowance for climate change. Please note the climate change allowances provided are not up to date. These were updated on 17 December 2019.**

You should refer to 'Flood risk assessments: climate change allowances' for the most up to date allowances. You will need to undertake further assessment of future flood risk using different allowances to ensure your assessment of future flood risk is based on best available evidence.

There is no additional information or health warnings for these levels/depths or the model from which they have been produced.

Strategic flood risk assessments

We recommend that you check the relevant local authority's strategic flood risk assessment (SFRA) as part of your work to prepare a site specific flood risk assessment.

This should give you information about:

- the potential impacts of climate change in this catchment
- areas defined as functional floodplain
- flooding from other sources, such as surface water, ground water and reservoirs

Your Lead Local Flood Authority is West Sussex County Council.

About this data

This data has been generated by strategic scale flood models and is not intended for use at the individual property scale. If you're intending to use this data as part of a flood risk assessment, please include an appropriate modelling tolerance as part of your assessment. The Environment Agency regularly updates its modelling. We recommend that you check the data provided is the most recent, before submitting your flood risk assessment.

Flood risk activity permits

Under the Environmental Permitting (England and Wales) Regulations 2016 some developments may require an environmental permit for flood risk activities from the Environment Agency. This includes any permanent or temporary works that are in, over, under, or nearby a designated main river or flood defence structure.

[Find out more about flood risk activity permits](#)

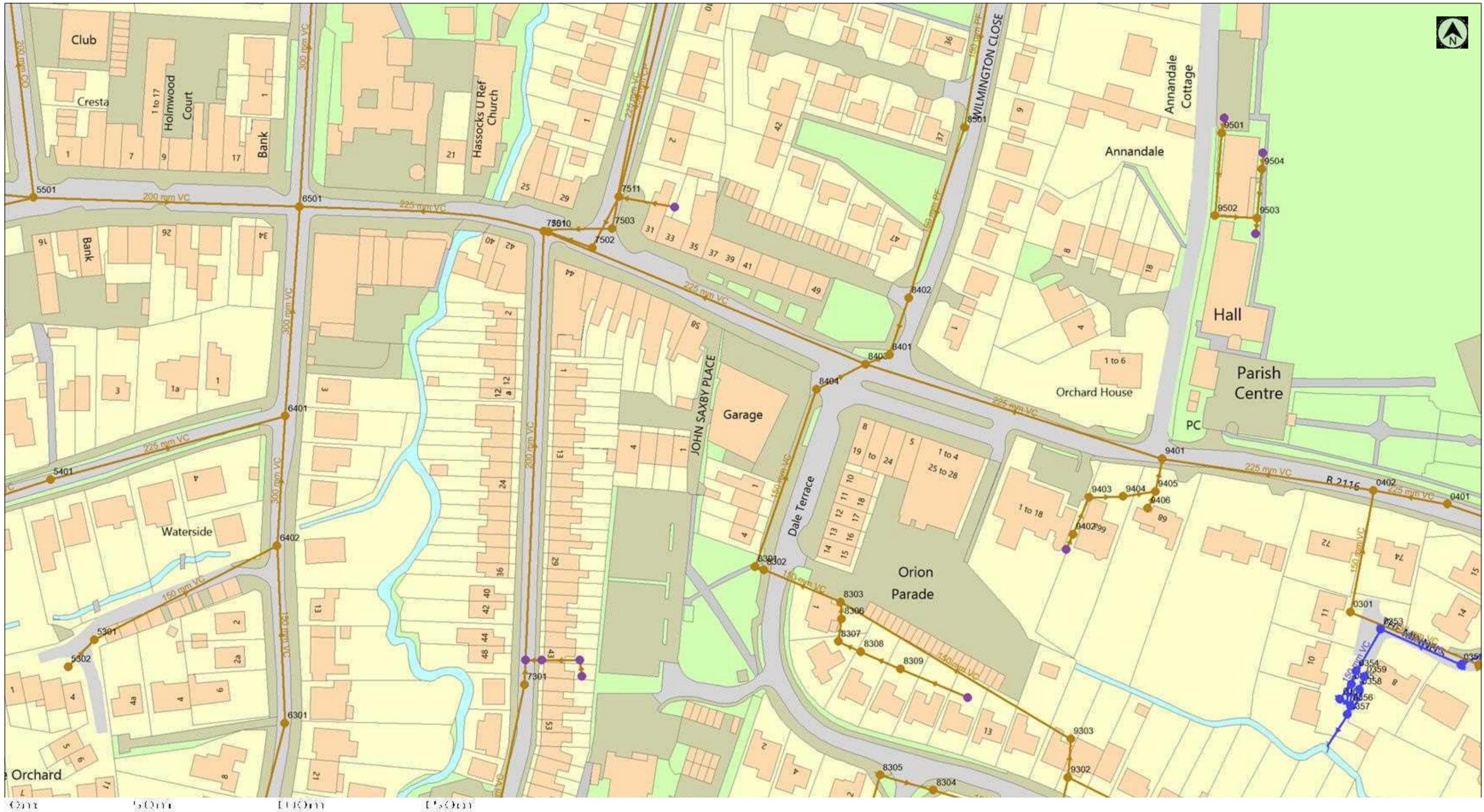
Help and advice

Contact the Solent and South Downs Environment Agency team at ssdenquiries@environment-agency.gov.uk for:

- [more information about getting a product 5, 6, 7 or 8](#)
- general help and advice about the site you're requesting data for



APPENDIX E – Southern Water Sewer Records



(c) Crown copyright and database rights 2021 Ordnance Survey 100031673

Date: 06/05/21

Scale: 1:1250

Map Centre: 530810,115452

Data updated: 19/04/21

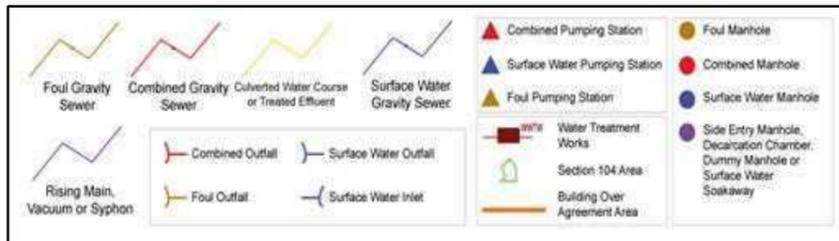
Our Ref: 552631 - 1

Wastewater Plan A3

The positions of pipes shown on this plan are believed to be correct, but Southern Water Services Ltd accept no responsibility in the event of inaccuracy. The actual positions should be determined on site. This plan is produced by Southern Water Services Ltd (c) Crown copyright and database rights 2021 Ordnance Survey 100031673. This map is to be used for the purposes of viewing the location of Southern Water plant only. Any other uses of the map data or further copies is not permitted.

WARNING: BAC pipes are constructed of Bonded Asbestos Cement.

WARNING: Unknown (UNK) materials may include Bonded Asbestos Cement.



andyk@hop.uk.com

16002-01 Keymer Road





APPENDIX F – CCTV Drainage Survey



Aquatech Drains Ltd

60 Keymer Rd, Hassocks

16 May 2021

A large, stylized version of the WinCan V8 logo is superimposed over a photograph of a rain puddle on a metal surface. The puddle shows concentric ripples from a raindrop, and the logo is reflected in the water. The background is a warm, golden-brown color, suggesting a sunset or sunrise.

WinCan V8

www.wincan.com

GRADE 3,4 & 5 Summary

STRUCTURAL DEFECTS

Structural defects			
Section	PLR	Grade	Fault description
3	IC1 Parking area	3	Fracture, circumferential, from 12 to 12 o'clock
7	SW3 parking area	5	Deformed sewer/drain, 20%
8	SW4 side access	5	Deformed sewer/drain, 30%
9	RWP1 internal area	5	Multiple defects at 6.4m

Grade 3; Best practice suggests consideration be given to repair in the medium term

Grade 4; Best practice suggests consideration be given to a repair to avoid potential collapse

Grade 5; Best practice suggests this pipe is at risk of collapse at any time; urgent consideration should be given to a repair to avoid collapse

SERVICE / OPERATIONAL DEFECTS

Service defects			
Section	PLR	Grade	Fault description
1	IC2 parking area	3	Attached deposits, other, from 5 to 7 o'clock, 15% cross-sectional
5	SW1 parking area	4	Settled deposits, fine, 25% cross-sectional area loss

Grade 3; Best practice suggests consideration be given to maintenance activities in the medium term

Grade 4; Best practice suggests consideration be given to maintenance activity to avoid potential blockage

Grade 5; Best practice suggests this pipe is at immediate risk of backing up / causing flooding

Abandoned Surveys

Camera no access		
Section	PLR	Fault description
All Surveys Completed		

Information

These summaries are based on the SRM grading from the WRC

Table of contents

Project Name: 60 Keymer Rd, Hassocks	Project number:	Date: 16/05/2021	Contact:	
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Profile Report	1
Inspection Summary	2
SRMReport :	8
Inspection: 1	
Project Information	10
Section: 1, IC2 --- IC1	12
Section: 2, FWG1 --- IC2	17
Section: 3, IC1 --- Mainsewer	21
Section: 4, RG1 --- SW1	25
Section: 5, SW1 --- SW2	30
Section: 6, SW2 --- Main SW	36
Section: 7, SW3 --- SW4	39
Section: 8, SW4 --- Main	43
Section: 9, RWP1 --- SW5	47
Section: 10, SW5 --- Main	53

Place :

Aquatech Drains Ltd

Solway Ave

Brighton

Tel: 01273 933705

Fax:

Email: Jason@aquatechdrains.co.uk

/ Main sectionsProject name :
60 Keymer Rd, Hassocks

Project number :

Contact :

Date :
16/05/2021

Nr.	US MH	DS MH	Date	Road	Tape No.	Material	m	(m)
2	FWG1	IC2	16/05/2021	Keymer Rd		Vitrified clay	4.10	4.10
4	RG1	SW1	16/05/2021	Keymer Rd		Pitch fibre	4.90	4.90
5	SW1	SW2	16/05/2021	Keymer Rd		Pitch fibre	20.70	20.70

Pipe size: CIRCULAR 100/100 = 29.7 m (29.7 m)

Nr.	US MH	DS MH	Date	Road	Tape No.	Material	m	(m)
1	IC2	IC1	16/05/2021	Keymer Rd		Vitrified clay	12.70	12.70
3	IC1	Mainsewer	16/05/2021	Keymer Rd		Vitrified clay	1.70	1.70
6	SW2	Main SW	16/05/2021	Keymer Rd		Vitrified clay	3.30	3.30
7	SW3	SW4	16/05/2021	Keymer Rd		Pitch fibre	14.70	14.70
8	SW4	Main	16/05/2021	Keymer Rd		Pitch fibre	12.30	12.30
9	RWP1	SW5	16/05/2021	Keymer Rd		Vitrified clay	6.50	6.50
10	SW5	Main	16/05/2021	Keymer Rd		Vitrified clay	11.00	11.00

Pipe size: CIRCULAR 150/150 = 62.2 m (62.2 m)**All sections = 91.9 m (91.9 m)**

Inspection Summary

Project Name: 60 Keymer Rd, Hassocks	Project number:	Contact:	Date: 16/05/2021
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Total Length of sewer network	91.90 m
Inspected Length of sewer network	91.90 m
Not inspected Length of sewer network	0.00 m
Total Length of sewer network (abandoned)	0.00 m
Inspected Length of Sewer network (abandoned)	0.00 m
Not inspected Length of sewer network (abandoned)	0.00 m
Total Length of house connections (satellite)	0.00 m
Inspected Length of house connections (satellite)	0.00 m
Not inspected Length of house connections (satellite)	0.00 m
Number of Sections	10
Number of sections (abandoned)	0
Number of house connections	0
Number of Photos	61

Inspection Summary

Project Name: 60 Keymer Rd, Hassocks	Project Number:	Contact:	Date: 16/05/2021
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Place: Hassocks	Section length: 12.70 m
Road: Keymer Rd	Pipe length: 150 mm
U/S MH: IC2	Material: Vitrified clay
D/S MH: IC1	Shape: Circular

	0.00	MH	Start node type, manhole, reference number : IC1	0
	0.00	WL	Water level, 0% of the vertical dimension	0
	0.00	GP	General photograph taken at this point	0
	0.00	GP	General photograph taken at this point	0
	3.10	DEZ	Attached deposits, other, from 5 to 7 o'clock, 15% cross-sectional area loss	3
	9.00	DEZJ	Attached deposits, other at joint, from 5 to 7 o'clock, 20% cross-sectional area loss	4
	9.20	WL	Water level, 20% of the vertical dimension	0
	12.70	MHF	Finish node type, manhole reference number: IC2	0

Place: Hassocks	Section length: 4.10 m
Road: Keymer Rd	Pipe length: 100 mm
U/S MH: FWG1	Material: Vitrified clay
D/S MH: IC2	Shape: Circular

	0.00	MH	Start node type, manhole, reference number : IC2	0
	0.00	WL	Water level, 0% of the vertical dimension	0
	0.50	LR	Line deviates right	0
	3.30	LR	Line deviates right	0
	3.90	JDM	Joint displaced, medium	1
	4.10	MHF	Finish node type, manhole reference number: FWG1	0

Inspection Summary

Project Name: 60 Keymer Rd, Hassocks	Project Number:	Contact:	Date: 16/05/2021
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Place: Hassocks	Section length: 1.70 m
Road: Keymer Rd	Pipe length: 150 mm
U/S MH: IC1	Material: Vitrified clay
D/S MH: Mainsewer	Shape: Circular

	IC1	0.00	MH	Start node type, manhole, reference number : IC1	0
		0.00	WL	Water level, 0% of the vertical dimension	0
		0.40	FC	Fracture, circumferential, from 12 to 12 o'clock	3
		0.70	JN	Junction, at 12 o'clock, diameter 100mm	0
		1.40	LD	Line deviates down	0
	Mainsewer	1.70	MHF	Finish node type, manhole reference number: Mainsewer	0

Place: Hassocks	Section length: 4.90 m
Road: Keymer Rd	Pipe length: 100 mm
U/S MH: RG1	Material: Pitch fibre
D/S MH: SW1	Shape: Circular

	SW1	0.00	MH	Start node type, manhole, reference number : SW1	0
		0.00	WL	Water level, 0% of the vertical dimension	0
		3.00	MC	Material changes, vitrified clay	0
		3.70	JN	Junction, at 9 o'clock, diameter 100mm	0
		4.00	MC	Material changes, pitch fibre	0
		4.90	MC	Material changes, vitrified clay	0
	RG1	4.90	MHF	Finish node type, manhole reference number: RG1	0

Inspection Summary

Project Name: 60 Keymer Rd, Hassocks	Project Number:	Contact:	Date: 16/05/2021
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Place: Hassocks	Section length: 20.70 m
Road: Keymer Rd	Pipe length: 100 mm
U/S MH: SW1	Material: Pitch fibre
D/S MH: SW2	Shape: Circular

	SW1	0.00	MH	Start node type, manhole, reference number : SW1	0
		0.00	WL	Water level, 0% of the vertical dimension	0
		0.30	DES	Settled deposits, fine, 25% cross-sectional area loss	4
		8.00	MC	Material changes, vitrified clay	0
		8.40	JN	Junction, at 3 o'clock, diameter 100mm	0
		8.80	MC	Material changes, pitch fibre	0
		18.50	MC	Material changes, vitrified clay	0
		19.00	JN	Junction, at 9 o'clock, diameter 100mm	0
		20.10	JN	Junction, at 3 o'clock, diameter 100mm	0
		20.70	MHF	Finish node type, manhole reference number: SW2	0

Place: Hassocks	Section length: 3.30 m
Road: Keymer Rd	Pipe length: 150 mm
U/S MH: SW2	Material: Vitrified clay
D/S MH: Main SW	Shape: Circular

	SW2	0.00	MH	Start node type, manhole, reference number : SW2	0
		0.00	WL	Water level, 20% of the vertical dimension	0
		3.20	GP	General photograph taken at this point	0
		3.30	MHF	Finish node type, manhole reference number: Main SW	0

Inspection Summary

Project Name: 60 Keymer Rd, Hassocks	Project Number:	Contact:	Date: 16/05/2021
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Place: Hassocks	Section length: 14.70 m
Road: Keymer Rd	Pipe length: 150 mm
U/S MH: SW3	Material: Pitch fibre
D/S MH: SW4	Shape: Circular

	SW3	0.00	MH	Start node type, manhole, reference number : SW3	0
		0.00	WL	Water level, 10% of the vertical dimension	0
		0.00	GP	General photograph taken at this point	0
		0.80	D	Deformed sewer/drain, 20%	5
		11.20	D	Deformed sewer/drain, 30%	5
	SW4	14.70	MHF	Finish node type, manhole reference number: SW4	0

Place: Hassocks	Section length: 12.30 m
Road: Keymer Rd	Pipe length: 150 mm
U/S MH: SW4	Material: Pitch fibre
D/S MH: Main	Shape: Circular

	SW4	0.00	MH	Start node type, manhole, reference number : SW4	0
		0.00	WL	Water level, 20% of the vertical dimension	0
		3.30	D	Deformed sewer/drain, 30%	5
		4.40	D	Deformed sewer/drain, 30%	5
		7.60	D	Deformed sewer/drain, 30%	5
		10.10	D	Deformed sewer/drain, 20%	5
		12.10	GP	General photograph taken at this point	0
	Main	12.30	MHF	Finish node type, manhole reference number: Main	0

Inspection Summary

Project Name: 60 Keymer Rd, Hassocks	Project Number:	Contact:	Date: 16/05/2021
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Place: Hassocks	Section length: 6.50 m
Road: Keymer Rd	Pipe length: 150 mm
U/S MH: RWP1	Material: Vitrified clay
D/S MH: SW5	Shape: Circular

	SW5	0.00	MH	Start node type, manhole, reference number : SW5	0
		0.00	WL	Water level, 0% of the vertical dimension	0
		0.00	GP	General photograph taken at this point	0
		0.50	SC	Dimension changes, 100mm high, 100mm wide	0
		5.70	CC	Crack, circumferential, from 12 to 12 o'clock	2
		5.80	LL	Line deviates left	0
		5.80	OJM	Open joint, medium	1
		6.40	LU	Line deviates up	0
		6.40	H	Hole in drain/sewer, from 5 to 9 o'clock	5
	RWP1	6.50	MHF	Finish node type, manhole reference number: RWP1	0

Place: Hassocks	Section length: 11.00 m
Road: Keymer Rd	Pipe length: 150 mm
U/S MH: SW5	Material: Vitrified clay
D/S MH: Main	Shape: Circular

	SW5	0.00	MH	Start node type, manhole, reference number : SW5	0
		0.00	WL	Water level, 0% of the vertical dimension	0
		7.30	WL	Water level, 25% of the vertical dimension	0
		9.30	JN	Junction, at 3 o'clock, diameter 100mm	0
	Main	11.00	MHF	Finish node type, manhole reference number: Main	0

Service / Operational Defects (SRM 4)Project name :
60 Keymer Rd, Hassocks

Project Number :

Contact :

Date :
16/05/2021

No.	PLR	Dir.	Use	Shape / Size	Date	Mat.	Total Length	Insp. Length	Peak HWG	Peak Score	Grade	Mean Score	Total Score
1	IC2parking area	U	F	C 150/150	16/05/2021	VC	12.70	12.70	-	2	3	0.16	2
2	FWG1internal area	U	F	C 100/100	16/05/2021	VC	4.10	4.10	-	0	1	0	0
3	IC1Parking area	D	F	C 150/150	16/05/2021	VC	1.70	1.70	-	0	1	0	0
4	RG1parking area	U	S	C 100/100	16/05/2021	PF	4.90	4.90	-	0	1	0	0
5	SW1parking area	D	S	C 100/100	16/05/2021	PF	20.70	20.70	3	5	4	0.24	5
6	SW2side area	D	S	C 150/150	16/05/2021	VC	3.30	3.30	-	0	1	0	0
7	SW3parking area	D	S	C 150/150	16/05/2021	PF	14.70	14.70	-	0	1	0	0
8	SW4side access	D	S	C 150/150	16/05/2021	PF	12.30	12.30	-	0	1	0	0
9	RWP1internal area	U	S	C 150/150	16/05/2021	VC	6.50	6.50	3	0	1	0	0
10	SW5internal area	D	S	C 150/150	16/05/2021	VC	11.00	11.00	-	0	1	0	0