



DRAINAGE STRATEGY

ISSUE 1

June 2026

Proposed Residential Development

Adjacent to 144 St Ediths Marsh

Bromham

SN15 2DG

Document Control

Client	Mr M Burbage		
Report title	Flood Risk Assessment and Drainage Strategy		
Report reference	1284-REP01		
Report status	For Approval		
Prepared by	A.Dixon BSc(Hons) CEng MICE		
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APPENDIX	TITLE	PRODUCED BY
Appendix A – Drawings by DC	SW Drainage Strategy	Dixon Civils
Appendix B – Drawings by others	Proposed Site Plan	Atelier 17
Appendix C – Sewer Records		
Appendix D – Greenfield Runoff Calculations		
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1.0 Introduction

This Flood Risk Assessment and drainage strategy has been prepared on behalf of Mr M Burbage for the proposed dwelling on land adjacent to 144 St Ediths Marsh, Bromham, in support of planning application reference PL/2026/02932.

This report will provide flood risk information and demonstrate how the appropriate means of sustainable surface water drainage will be achieved for the development without worsening flood risk in the area or putting itself at risk of flooding in line with national guidance.

The development proposal comprises the construction of a new 4 bedroom detached dwelling with associated parking, garage and gardens, within land previously making up the garden of number 144 St Ediths Marsh.

Access to the site is off a private drive serving number 144.

Refer to the Proposed Site Plan (A17 25 40 P03 Rev B) enclosed within Appendix B of this report.

2.0 The Existing Site

The application site covers 1000m² (0.10ha) of land occupied by garden and landscaping.

The site is centred on Ordnance Survey grid reference ST 97623 64347 and co-ordinates: E397623, N164347. The post code for the site is SN15 2DG.

The site is located within flood zone 1 and is bounded on the north, east and west by existing dwellings and to the south by open fields. Land use in the vicinity is predominantly residential.

2.1 Existing ground conditions

British Geological Survey (BGS) mapping indicates that the site is located over the Lower Greensand Group - Sandstone.

LandIS Soilscape mapping categorises the soils as freely draining.

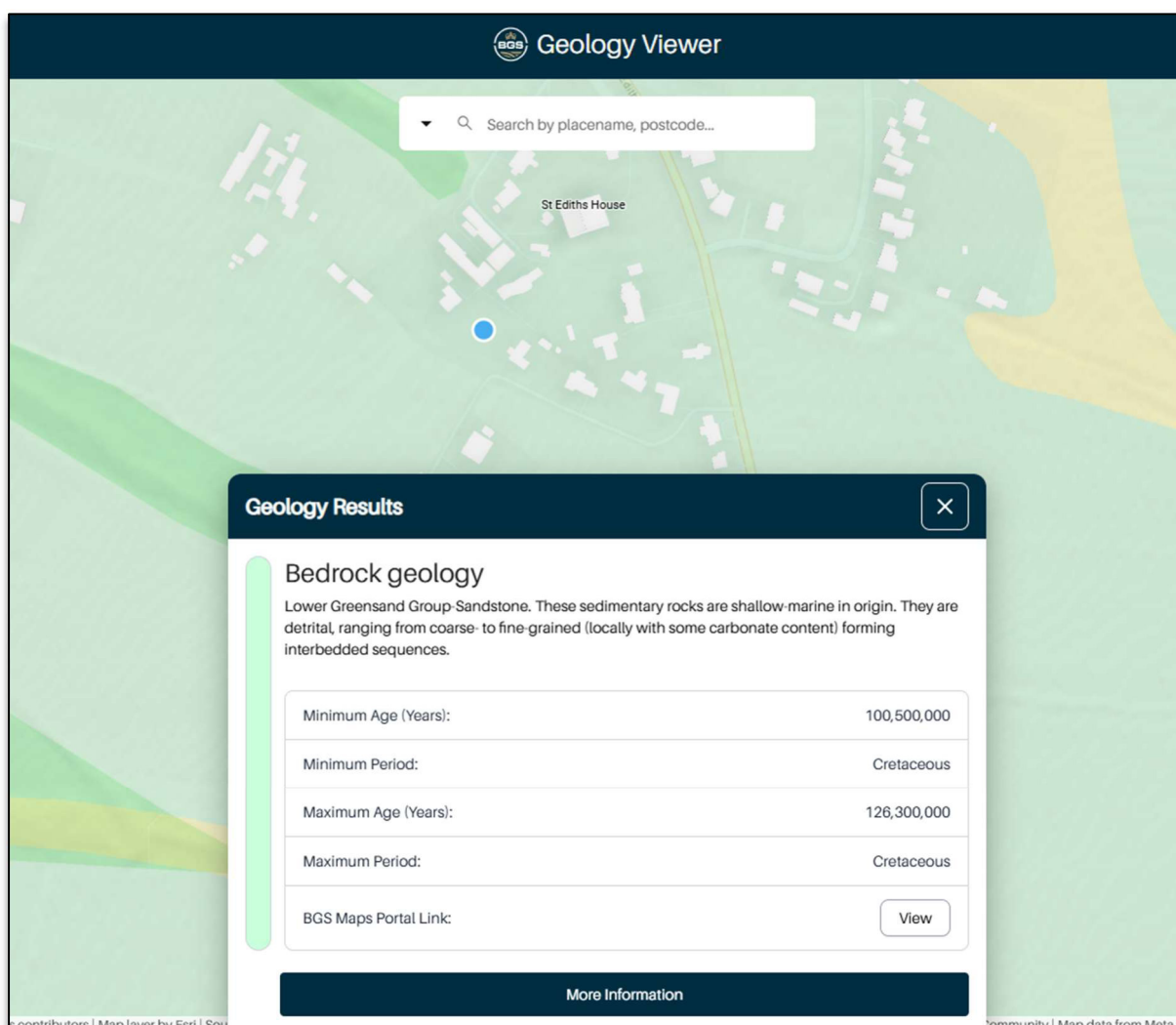


Figure 1: Bedrock Geology - Extract from British Geological Survey Geology of Britain Viewer
Source: <https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer>

2.2 Intrusive Investigations

An intrusive investigation was completed in June 2026 to confirm the soil type and infiltration rate. The survey included 3 number infiltration tests to BRE365 standard. Please refer to the test results enclosed within Appendix E of this report, which resulted in a lowest recorded infiltration rate of 6.17×10^{-5} m/s. Following the infiltration testing, the trial pit was dug further to a total depth of 2.0m below ground level. No groundwater ingress was observed for the duration of the test.



2.3 Existing Watercourses and Drainage Features

There are no watercourses within or adjacent to the development. An unnamed culverted watercourse runs approximately 100m from the north and east boundaries of the site, heading from north to south.

Asset records obtained from Wessex Water indicate the presence of public gravity foul water sewer within the adjacent property of 146 St Ediths Marsh to the east. A private foul water drain serving the existing property of number 144 crosses the application site.

Refer to Wessex Water sewer records within Appendix C of this report.

2.4 Existing surface water drainage arrangement

The existing dwelling of 144 St Ediths Marsh is assumed to drain to ground via infiltration and the application site being made up of landscaped gardens is not formally drained.

In extreme rainfall events, overland flow may occur following the site topography falling to the east. Expected greenfield runoff rates for the existing site are included in appendix D.

3.0 Evaluation of Flood Risk

This section presents an assessment of flood risk to the development and includes recommended flood risk mitigation measures if required. A summary of flood risk issues and proposed mitigation measures are recorded in Table 4.7 below.

3.1 Historic Flooding Events

Wiltshire Council's Strategic Flood Risk Data Explorer maps show the nearest recorded flood event approximately 300m to the southeast, adjacent to number 186A St Ediths Marsh in 2014, where sewer capacity was exceeded during a 100year event.

3.2 Fluvial Flood Risk

The Flood Map for Planning for the locality as produced by the EA is shown in Figure 3 below and shows that that the site lies within Flood Zone 1.

Risk of fluvial flooding is therefore low and no mitigation is required.

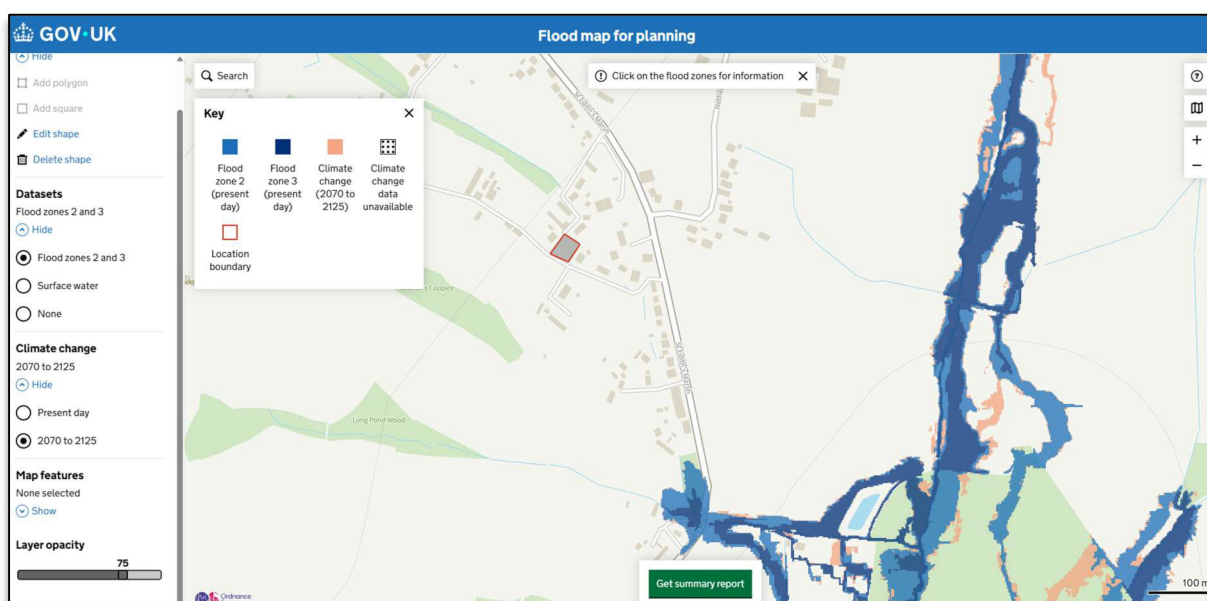


Figure 3: Extract from Central Government's 'Flood Map for Planning' Mapping Portal

Source: <https://flood-map-for-planning.service.gov.uk/>

3.3 Surface Water Flooding

Surface Water Flood mapping produced by the EA, shown in figure 4 below, highlights that the site is not at risk from surface water flooding, therefore the risk is low and no mitigation is required.

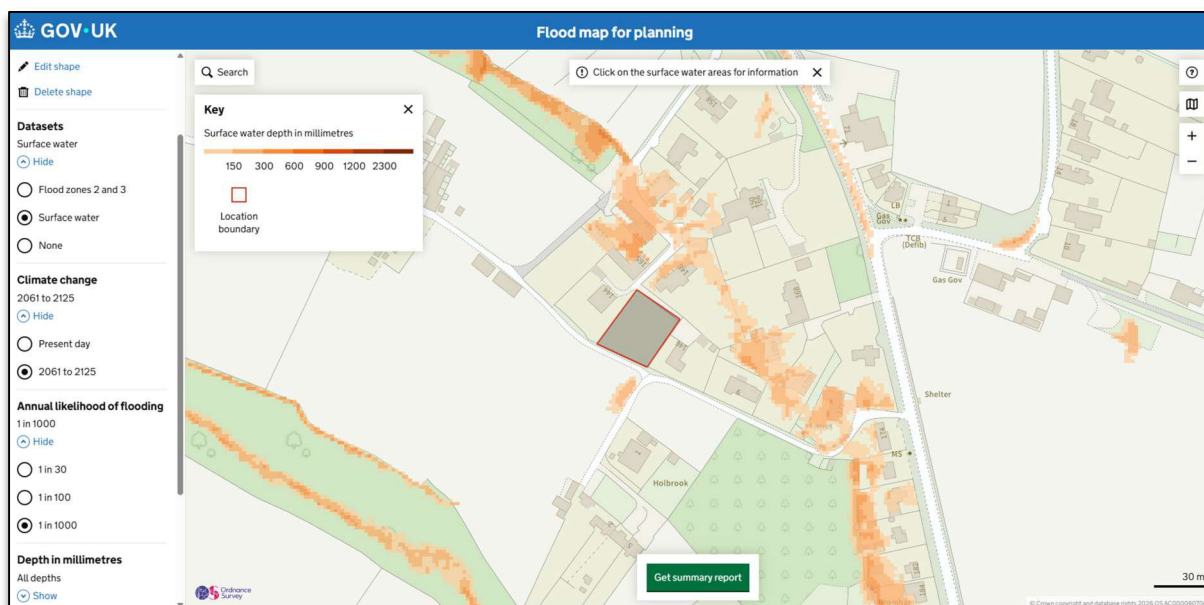


Figure 4: Extract from Central Government's 'Flood Map for Planning' Mapping Portal

Source: <https://flood-map-for-planning.service.gov.uk/>

3.4 Sewer Flooding

Wessex Water records indicate there to be a foul sewer within the adjacent property of 146 St Ediths Marsh to the southeast of the property. There are no surface water sewers within the vicinity.

Wiltshire SFRA data explorer does not list any flood events relating to this sewer.

Risk of flooding from sewers is therefore low.

3.5 Groundwater

While the Wiltshire SFRA mapping highlights the site to be within an area at risk of groundwater flooding to surface and subsurface assets, a trial pit dug in June 2026 to a depth of 2m was found to be dry, confirming the site to be at low risk of flooding from groundwater.

3.6 Flooding from reservoirs or other artificial sources

The EA Map 'Extent of Flooding from Reservoirs' indicates that the site is not at risk from flooding from a reservoir breach. Therefore, flood risk from artificial sources is low.

3.7 Summary of Flood Risk

Source of Potential Flooding to the Development Site	Flood Risk	Mitigation/Comments
Fluvial	Low	The site is located within Flood Zone 1.
Public Sewers / Drains	Low	Wessex Water records indicate there are no surface sewers in the vicinity of the site. Nearest recorded sewer flooding incident 300m from site.
Overland Flow	Low	EA mapping indicates the site is at Low risk of flooding from this source.
Groundwater	Low/Medium	Site is located within a zone at risk of ground water emergence. On-site trial pit investigation to 2m below ground level did not reveal groundwater. Flooding from groundwater emergence is therefore considered low.
Artificial Sources	Low	EA Mapping confirms that the site is not located within an area at risk of flooding from this source.

4.0 Surface Water Drainage Proposals

Refer to DC Drawing 1284-01-01 [*Proposed Drainage Strategy*] in Appendix A.

This section of the report addresses how flood risk generated as a result of developing the site will be managed using sustainable control measures to ensure that flood risks are not increased on and off the site and how surface water is managed post development.

4.1 Drainage Hierarchy

The surface water drainage strategy for the site has been prepared according to the drainage discharge hierarchy from CIRIA C753 The SuDS Manual, where the first available option will be utilised as follows.

Technique		Summary
1	Infiltration to the maximum extent that is practical	Permeable surfaced driveway will drain all roof and hardstanding catchment to ground via infiltration through its sub-base.
2	To surface water body	Not required – No surface water body within the vicinity of the site
3	To a surface water sewer, highway drain or another drainage system	Not required
4	To a combined sewer	Not required

4.2 Infiltration and Attenuation Design

As reported in section 2.2 of this report, a desktop study and intrusive investigation revealed that the soils below the site are suitable for infiltration-based SuDS.

It is therefore proposed that stormwater runoff from the new dwelling, garage and driveway will be attenuated within the clean stone sub-base below the permeable surfaced drive and drain via infiltration through the base of the system.

Calculations indicate SuDS attenuation of 5.43m³ will be required to accommodate stormwater flows from the proposed dwelling roof, garage and driveway for storm events up to and including the 10year +45% climate change event. The 130m² permeable surfaced driveway with a minimum depth of 150mm of clean stone sub-base will provide an attenuation volume of 5.85m³.

Refer to the proposed drainage calculations enclosed within Appendix D of this report.

4.3 Design Exceedance

Should the drainage system and SuDS fail under extreme events or blockages, floodwaters will follow elevated design levels directing surface water flow away from the building toward the site boundary and access road where the natural topography would then be followed to the east, mirroring the existing development arrangement.

Overland design exceedance arrows are indicated on the proposed drainage strategy layout drawing 1284-01-01 in appendix A.

4.4 Water Quality

Whilst roof water is considered fairly uncontaminated, runoff from the parking area can be susceptible to hydrocarbon contamination, which in this instance will be intercepted within permeable stone and textiles that make up the sub-base construction of the external site areas, before discharging to the ditch network.

Water quality has been assessed in line with the Simple Index approach from Chapter 26 of CIRIA C753 The SuDS Manual:

1. Step 1 – Allocate suitable pollution hazard indices for the proposed land use.
2. Step 2 – Select SuDS with a total pollution mitigation index that equals or exceeds the pollution hazard index.

Pollution Hazard Indices

Below figures are obtained from Table 26.2 CIRIA C753 The SuDS Manual '*Pollution hazard indices for different land use classifications*'

Land use	Pollution hazard level	Total suspended solids (TSS)	Metals	Hydrocarbons
Roofs	Very Low	0.2	0.2	0.05
Individual property driveways, residential car parks and low traffic roads	Low	0.5	0.4	0.4

Pollution Mitigation Indices

Below figures are taken from Table 26.3 & 26.4 CIRIA C753 The SuDS Manual '*Indicative SuDS mitigation indices for discharge to surface waters and groundwater*'

SuDS Feature	Total suspended solids (TSS)	Metals	Hydrocarbons
Permeable Pavement	0.7	0.6	0.7

The pollution mitigation indices for the proposed drainage system therefore exceed the pollution hazard indices and provide suitable pollutant removal.

4.5 Adoption

The onsite drainage components will remain private and be the maintenance responsibility of the property owners.

4.6 Maintenance

Regular inspection and maintenance are important for the effective operation of the SuDS systems as designed. The regular maintenance of SuDS should be carried out in line with C753 The SUDS Manual (CIRIA, November 2015) or as per manufacturer's specification.

Pipework and Catchpits

It is not envisaged that silt build up within the pipework systems will require rigorous maintenance. Notwithstanding this, a suitable maintenance regime for the systems will comprise of routine inspection (every six months) and silt removal as necessary.

Permeable Paving

Permeable surfaces need to be regularly cleaned of silt and other sediments to preserve the infiltration capability of the surface. Suggested brushing regime would be at the end of winter to collect winter debris, mid-summer to collect dust, vegetation and grass-type deposits and after autumn leaf fall.

Drainage Element	Schedule	Maintenance Requirement	Frequency
Permeable Paving	Regular	Brushing and vacuuming over whole surface	Once a year, after autumn leaf fall
	Occasional	Removal of weeds	As required
	Remedial	Remedial work to any depressions or cracked or broken blocks considered a hazard to end users or detrimental to performance. Rehabilitation of surface and upper sub-structure by remedial sweeping	As required Every 10 – 15 years, or as required

Drainage Element	Schedule	Maintenance Requirement	Frequency
	Monitoring	Initial inspection Inspect for evidence of weed growth or poor operation Inspect silt accumulation rates Monitor inspection chambers	Monthly for 3 months after installation Three monthly, 48 hours after large storms in first six months Annually Annually
Pipework and Catchpits	Regular	Inspect for accumulation of silt Inspect for debris and litter Inspect inlets and outlets for blockages	Every six months
	Occasional	Remove debris and litter Remove silt	As required

5.0 Construction Management Plan

The proposals are relatively small in scale therefore the risk of discharge of significant quantities of surface water runoff, suspended solids and other contaminants is relatively low. Notwithstanding this, the temporary measures outlined below are proposed to prevent off site runoff for the duration of the works. These measures should be incorporated into the wider Construction Management Plan.

Construction activities on site will mainly comprise stripping of the existing surface and excavation for the construction of building foundations, external surfacing and proposed SuDS features.

Site should be stripped in phases, to maintain existing vegetated surfaces which will intercept runoff until construction in the area is necessary.

Runoff will then be retained within excavated trenches and is unlikely to move offsite. Retained water will infiltrate at source and the contractor should monitor the performance of soil infiltration and increase pit sizes as required on the basis of the quantity of dewatering flow generated.

Dewatering of foundation excavations while being worked on will be pumped to temporary gravel pits for dispersion by infiltration.

Any sediment gathered will be removed regularly and stockpiled onsite.

Any existing gullies to be retained which are situated in the vicinity of the works will be temporarily covered with geotextiles in order to prevent construction sediments entering the existing attenuation tank. Textiles should be replaced periodically to maintain flows to the sewer network.

All necessary precautions will be taken by the contractor to prevent pollutants from construction activities entering the drainage system. Fuels, chemicals and materials containing cement should be stored in accordance with current guidance.

6.0 Conclusions

The proposed development will result in an increase in impermeable surface area compared to the existing site. Surface water runoff from the proposed dwelling, garage and associated parking areas will be managed through sustainable drainage systems (SuDS), with all runoff directed to a permeable surfaced driveway designed to facilitate infiltration into the ground.

On-site attenuation storage will be provided within the permeable driveway SuDS features. These systems have been designed to accommodate a 1 in 10-year rainfall event, including a 45% allowance for climate change, in accordance with Local Policy.

The proposed SuDS infrastructure and all associated surface water drainage components will remain privately owned and maintained by the property owner.

Subject to the implementation and ongoing maintenance of the measures outlined in this report, it is concluded that the proposed development can be accommodated without increasing flood risk either on-site or within the surrounding area.

Dixon Civils Ltd

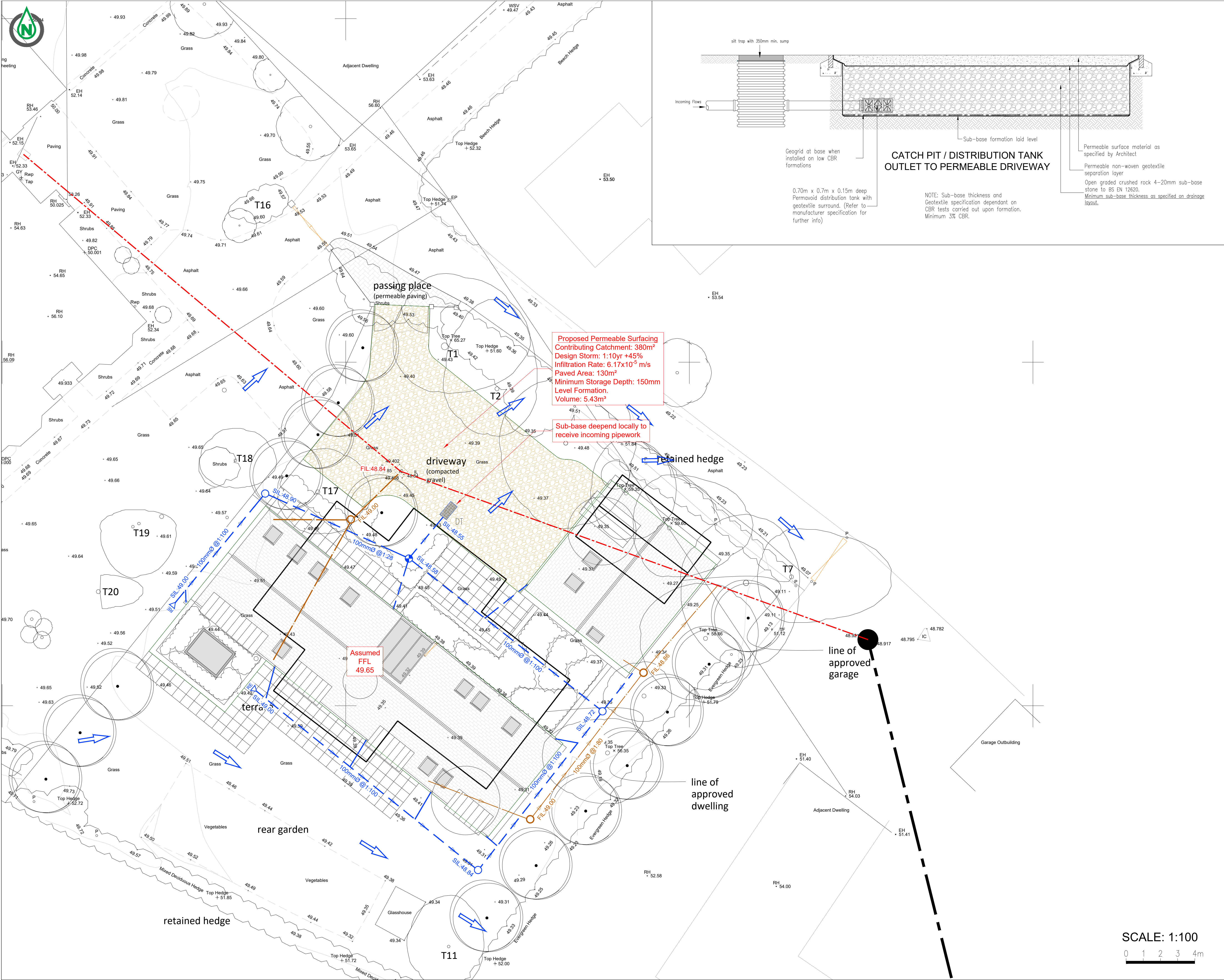
Issue 1 - June 2026

APPENDIX A

Drawings by Dixon Civils

Drawing ref. 1284-01-01

Surface Water Drainage Strategy



KEY:

- Existing Foul Water Sewer
- Existing Private Foul Water Drain
- Proposed Private Foul Water Drain
- Proposed Private Surface Water Drain
- Rodding Eye
- Surface Water Catchpit Chamber
- Permeable Paving Distribution Tank
- Permeable Surfacing
- Flood Flow Route (Over 1:10yr+45% storm event)

- GENERAL NOTES:**
- DO NOT SCALE FROM THIS DRAWING. WORK ONLY FROM STATED DIMENSIONS OR SETTING OUT COORDINATES.
 - ALL DIMENSIONS AND LEVELS ARE IN METRES AND RELATE TO ORDNANCE SURVEY LEVELS.
 - THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT SCHEME DRAWINGS AND SPECIFICATIONS.
 - ANY WORKS CONSTRUCTED PRIOR TO THE ISSUE OF LOCAL AUTHORITY APPROVAL IS ENTIRELY AT THE RISK OF THE CONTRACTOR/CLIENT.
 - THIS DRAWING IS FOR PLANNING APPROVAL PURPOSES ONLY.

Rev	DESCRIPTION	AD	DATE
-	FIRST ISSUE	AD	24.06.26

REVISIONS

Dixon Civils
Drainage & Infrastructure Design
www.DixonCivils.com 01249 490813 Enquiries@DixonCivils.com

CLIENT: Mr M Burbage

JOB TITLE: 144 St Ediths Marsh Bromham

DRAWING TITLE: Proposed Drainage Strategy

DATE: JUNE 2026 DRAWN: AD
DRAWING No: 1284-01-01 REV: - SCALE: 1:100 @ A1

ISSUED FOR: **FOR APPROVAL**

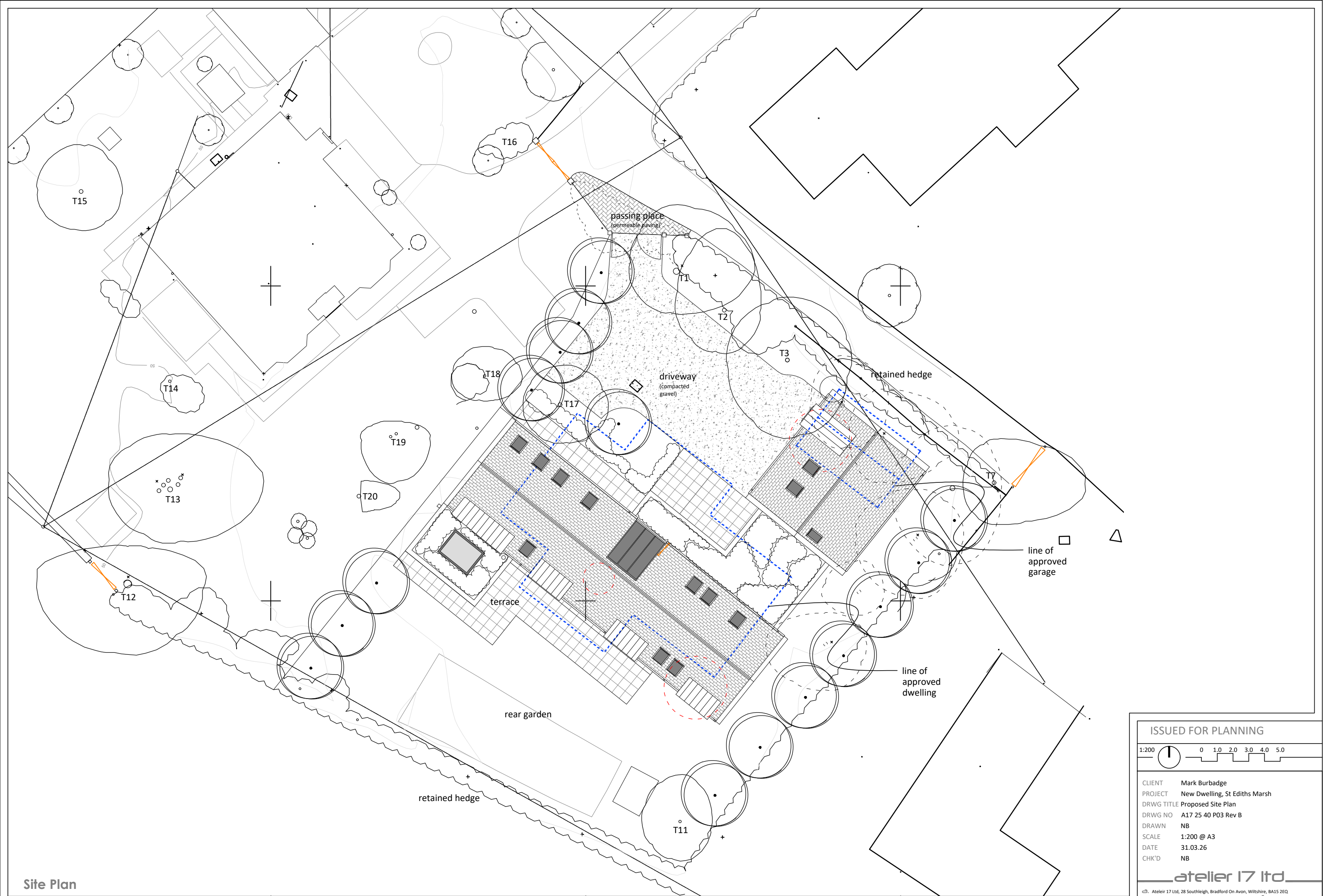
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APPENDIX B

Drawings by others

A17 25 40 P03 Rev B

Proposed Block Plan
(Atelier 17)



Site Plan

Proposed Drawings-New Dwelling, St Ediths Marsh

ISSUED FOR PLANNING

1:200

0

1.0

2.0

3.0

4.0

5.0

CLIENT	Mark Burbadge
PROJECT	New Dwelling, St Ediths Marsh
DRWG TITLE	Proposed Site Plan
DRWG NO	A17 25 40 P03 Rev B
DRAWN	NB
SCALE	1:200 @ A3
DATE	31.03.26
CHK'D	NB

atelier 17 ltd

Atelier 17 Ltd, 28 Southleigh, Bradford On Avon, Wiltshire, BA15 2EQ

nigel.a.w.bedford@gmail.com

www.atelier17.co.uk

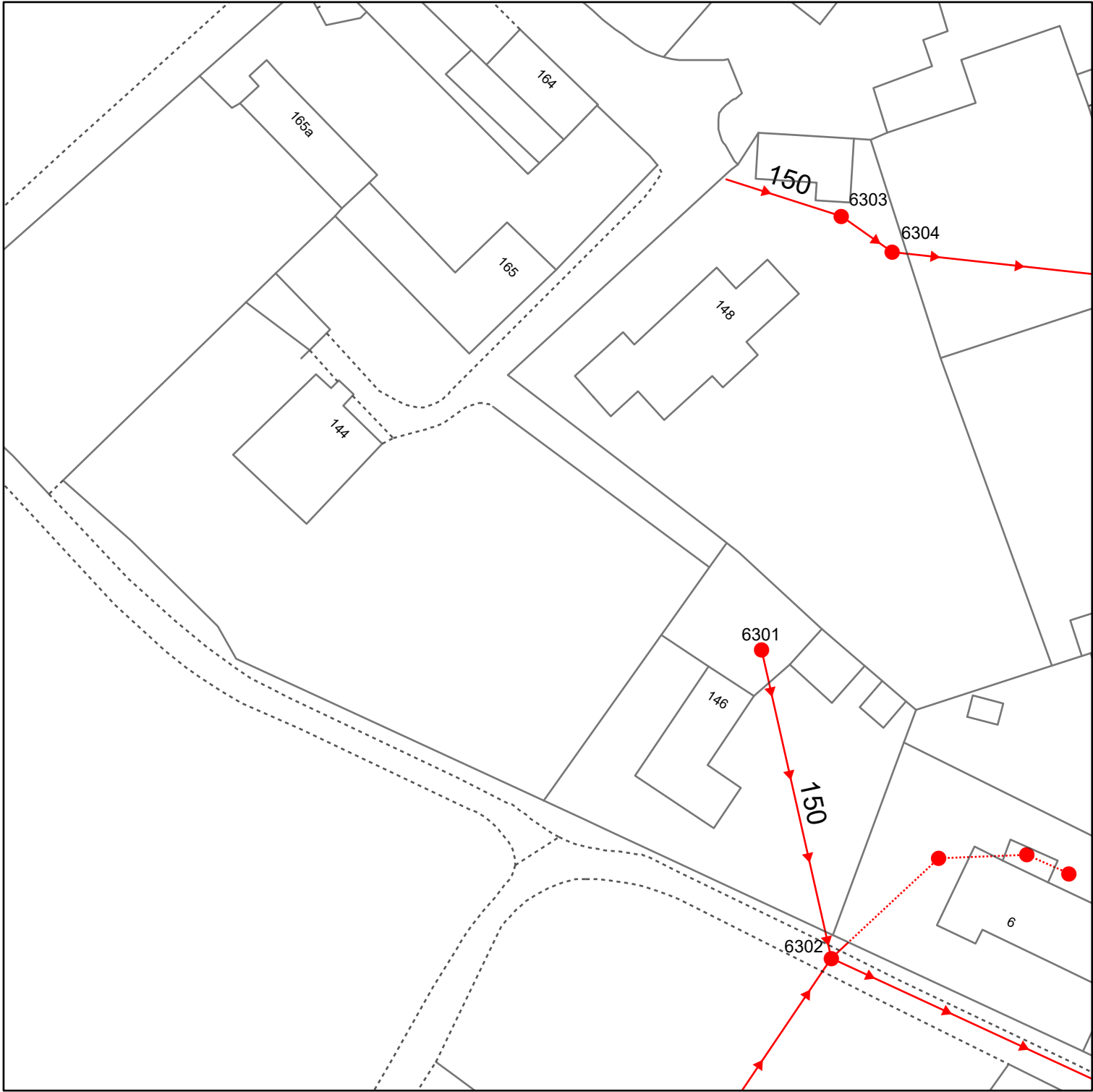
F. (01225) 862900

This drawing is copyright. Responsibility is not accepted for errors made by others in scaling from this drawing. All dimensions to be checked on site prior to commencement of work. All construction information should be taken from figured dimensions only. Only to be used on the site for which designed. Any discrepancies are to be reported to the architect.

APPENDIX C

Wessex Water Sewer Records

Wessex Water Network Map



Reproduced from the Ordnance Survey map with the permission of the Controller of His Majesty's Stationery Office. © Crown copyright and database rights (2026) OS AC0000848304

WATER MAINS		SEWERS		STRATEGIC PUBLIC		PRIVATE		SECTION 104		OTHER WESSEX PIPES		NON-WESSEX / UNKNOWN														
— Distribution	— Washout	— Foul	— Surface	— Combined	— Abandoned	— Foul	— Surface	— Combined	— Abandoned	— Rising Mains	— Standby Rising Mains	— Private Rising Mains	— Culverted Watercourse													
— Raw Water	— Abandoned	— Private								— EDM	— Effluent Disposal	— Highway Drain	— Use Unknown													
										— Overflow	— Syphon	— Status Unknown														
FITTINGS		STRUCTURES										OTHER STRUCTURES														
● Hydrant	● Other	● Manhole - Foul	● Manhole - Surface	● Manhole - Combined	● Inlet	● Outfall	● Lamphole	● Bifurcation - Foul	● Bifurcation - Surface	● Bifurcation - Combined	● Combined Sewage Overflow	● Pumping Station - Surface	● Pumping Stn - Foul/Combined	● Gully	● Vent Column	● Rodding Eye	● Catchpit	● Flushing Chamber	● Soakaway	● Non Return Valve	● Air Valve	● Hatch Box	● Washout	● Chamber	● Tunnel	● Interceptor

Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow). Some styles of line and symbol are shown on the key in sample/typical colours.

Information in this map is provided for identification purposes only. No warranty as to accuracy is given or implied. The precise route of pipe work may not exactly match that shown. Wessex Water does not accept liability for inaccuracies. Sewers and lateral drains adopted by Wessex Water under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011 are to be plotted over time and may not yet be shown. In carrying out any works, you accept liability for the cost of any repairs to Wessex Water apparatus damaged as a result of your works. You are advised to commence excavations using hand tools only. Mechanical digging equipment should not be used until pipe work has been precisely located. If you are considering any form of building works and pipe work is shown within the boundary of your property or a property to be purchased (or very close by) a surveyor should plot its exact position prior to commencing works or purchase. If you are proposing to build over or near Wessex Water's apparatus you should contact the Developer Services Team, tel: 01225 526333 or e-mail: developer.enquiries@wessexwater.co.uk to discuss your proposals. Details of assets within Wessex Water's land ownership are unavailable through this service.

Wessex Water
YTL GROUP

Date: 24/06/2026
Centre: 397627E, 164351N
Scale: 1:625
(when printed at A4 size)

APPENDIX D

Calculations

Existing Greenfield Runoff

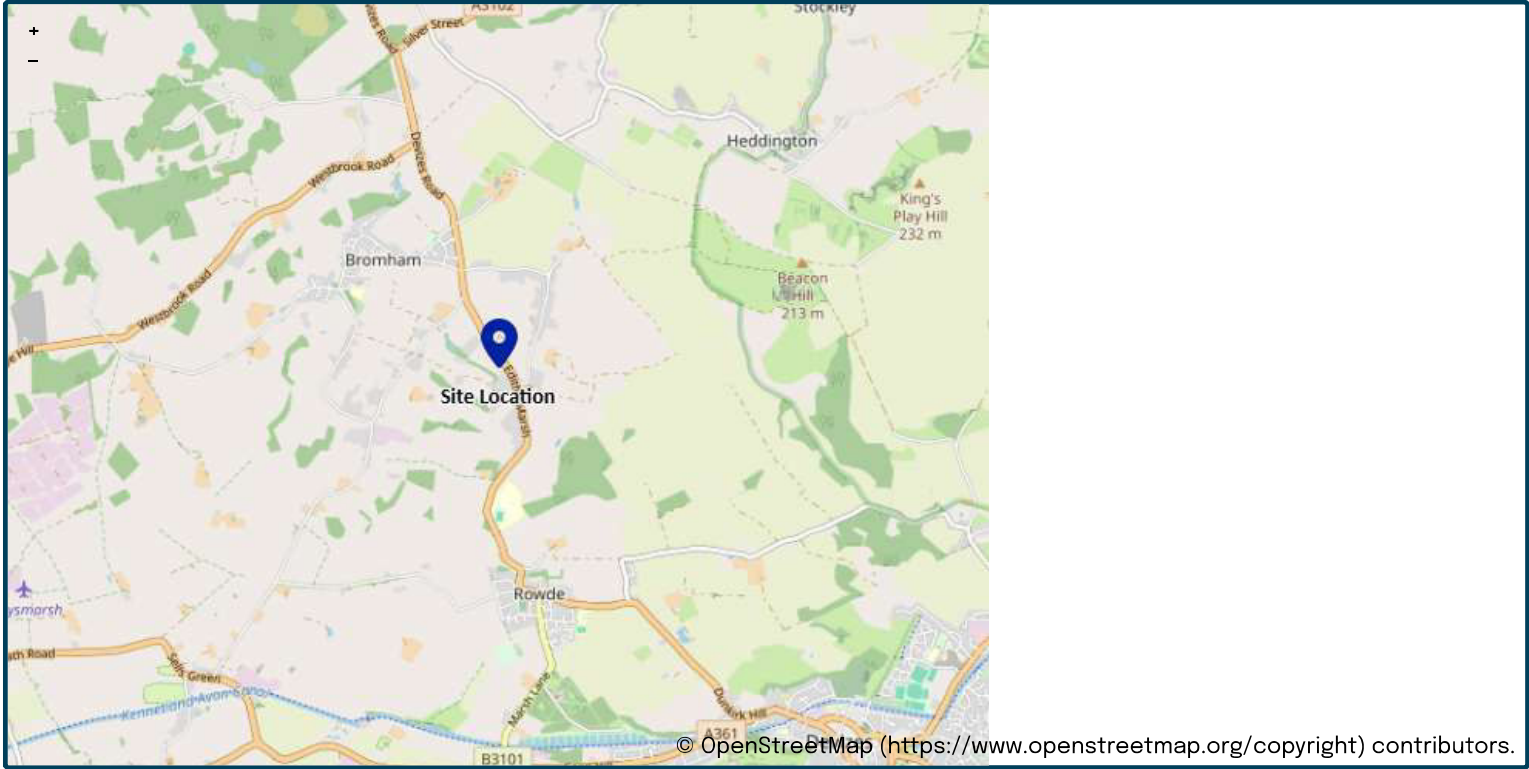
This is an estimation of the greenfield runoff rates that are used to meet normal best practice criteria in line with Environment Agency guidance “Rainfall runoff management for developments”, SC030219 (2013), the SuDS Manual C753 (CIRIA, 2015) and the non-statutory standards for SuDS (Defra, 2015). This information on greenfield runoff rates may be the basis for setting consents for the drainage of surface water runoff from sites.

Project details

Date	24/06/2026
Calculated by	ALAN DIXON
Reference	DC1284
Model version	2.2.3

Location

Site name	188 St Ediths Marsh
Site location	Bromham



Site easting (British National Grid)	397622
Site northing (British National Grid)	164342

Site details

Total site area (ha)	0.1	ha
----------------------	-----	----

Greenfield runoff

Method

Method	IH124
--------	-------

IH124

	<u>My value</u>		<u>Map value</u>
SAAR (mm)	694	mm	694
How should SPR be derived?	WRAP soil type		
WRAP soil type	1		1
SPR	0.1		
QBar (IH124) (l/s)	0.02	l/s	

Growth curve factors

	<u>My value</u>		<u>Map value</u>
Hydrological region	8		8
1 year growth factor	0.78		
2 year growth factor	0.93		
10 year growth factor	1.49		
30 year growth factor	1.95		
100 year growth factor	2.43		
200 year growth factor	2.78		

Results

Method	IH124	
Flow rate 1 year (l/s)	0.01	l/s
Flow rate 2 year (l/s)	0.02	l/s
Flow rate 10 years (l/s)	0.02	l/s
Flow rate 30 years (l/s)	0.03	l/s
Flow rate 100 years (l/s)	0.04	l/s
Flow rate 200 years (l/s)	0.05	l/s

Please note runoff estimation is subject to significant uncertainty. Results are therefore normally reported to only 1 decimal place. Where 2 decimal places are provided, this does not indicate accuracy to this level, it has been adopted to prevent ‘zero’ figures from being reported. Outputs less than 0.01 l/s are reported as 0.01 l/s.

Disclaimer

This report was produced using the Greenfield runoff rate estimation tool (2.2.3) developed by HR Wallingford and available at uksuds.com (<https://www.uksuds.com/>). The use of this tool is subject to the UK SuDS terms and conditions and licence agreement, which can both be found at uksuds.com/terms-conditions (<https://www.uksuds.com/terms-conditions>). The outputs from this tool have been used to estimate Greenfield runoff rates. The use of these results is the responsibility of the users of this tool. No liability will be accepted by HR Wallingford, the Environment Agency, Centre for Ecology and Hydrology, Wallingford Hydrosolutions or any other organisation for the use of these data in the design or operational characteristics of any drainage scheme.

APPENDIX E

Calculations

BRE365 Infiltration Rate

SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365

Soil infiltration rate (f) = $V_{p75-25}/a_{p50} \times t_{p75-25}$

where

V_{p75-25} = the effective storage volume of water in the trial pit between 75% and 25% effective depth

a_{p50} = the internal surface area of the trial pit up to 50% effective depth and including base area

t_{p75-25} = the time for the water level to fall from 75% to 25% effective depth

Soakaway Pit Dimensions

Length	1.5 m
Width	0.35 m
Depth	1.2 m

Depth to Water Level

75% full	0.3 m
50% full	0.6 m
25% full	0.9 m

Depth to Water Level

Start of test	0.3
End of test	1.2

Time to empty (from graph)

t_{p25}	0 min
t_{p50}	10 min
t_{p75}	25 min

Effective Storage Volume and Area

V_{p75-25} 0.315

a_{p50} 2.745

Soil Infiltration R 7.650E-05 m/s
0.275 m/hr

SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365

Soil infiltration rate (f) = $V_{p75-25}/a_{p50} \times t_{p75-25}$

where

V_{p75-25} = the effective storage volume of water in the trial pit between 75% and 25% effective depth

a_{p50} = the internal surface area of the trial pit up to 50% effective depth and including base area

t_{p75-25} = the time for the water level to fall from 75% to 25% effective depth

Soakaway Pit Dimensions

Length	1.5 m
Width	0.35 m
Depth	1.2 m

Depth to Water Level

75% full	0.3 m
50% full	0.6 m
25% full	0.9 m

Depth to Water Level

Start of test	0.3
End of test	1.2

Time to empty (from graph)

t_{p25}	0 min
t_{p50}	13 min
t_{p75}	28 min

Effective Storage Volume and Area

V_{p75-25} 0.315

a_{p50} 2.745

Soil Infiltration R 6.831E-05 m/s
0.246 m/hr

SOIL INFILTRATION RATE IN ACCORDANCE WITH BRE DIGEST 365

Soil infiltration rate (f) = $V_{p75-25}/a_{p50} \times t_{p75-25}$

where

V_{p75-25} = the effective storage volume of water in the trial pit between 75% and 25% effective depth

a_{p50} = the internal surface area of the trial pit up to 50% effective depth and including base area

t_{p75-25} = the time for the water level to fall from 75% to 25% effective depth

Soakaway Pit Dimensions

Length	1.5 m
Width	0.35 m
Depth	1.2 m

Depth to Water Level

75% full	0.3 m
50% full	0.6 m
25% full	0.9 m

Depth to Water Level

Start of test	0.3
End of test	1.2

Time to empty (from graph)

t_{p25}	0 min
t_{p50}	14 min
t_{p75}	31 min

Effective Storage Volume and Area

V_{p75-25} 0.315

a_{p50} 2.745

Soil Infiltration R 6.170E-05 m/s
0.222 m/hr

APPENDIX F

Calculations

Infodrainage Soakaway Calculations

Project: 144 St Ediths Marsh	Date: 19/06/2026		
	Designed by: AD	Checked by:	Approved By:
Report Details: Type: Inflows Storm Phase: Phase	Design: Infiltration Design		





House Catchment

Type : Catchment Area

Area (ha)	0.018
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Drive Catchment

Type : Catchment Area

Area (ha)	0.013
-----------	-------

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100



Garage Catchment

Type : Catchment Area

Area (ha)	0.006
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Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.750
Winter Volumetric Runoff	0.840
Time of Concentration (mins)	5
Percentage Impervious (%)	100

Project: 144 St Ediths Marsh	Date: 19/06/2026		
	Designed by: AD	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Storm Phase: Phase	Design: Infiltration Design		





Porous Paving

Type : Porous Paving

Dimensions

Exceedance Level (m)	49.400
Depth (m)	0.510
Base Level (m)	48.890
Paving Layer Depth (mm)	110
Membrane Percolation (m/hr)	1000.0
Porosity (%)	30
Length (m)	7.500
Long. Slope (1:X)	10000.00
Width (m)	14.000
Total Volume (m³)	12.600

Inlets

Inlet 1

Inlet Type	Lateral Inflow
Incoming Item(s)	Drive Catchment
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet 2

Inlet Type	Point Inflow
Incoming Item(s)	Garage Catchment
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet 3

Inlet Type	Point Inflow
Incoming Item(s)	House Catchment
Bypass Destination	(None)
Capacity Type	No Restriction

Advanced

Base Infiltration Rate (m/hr)	0.222
Side Infiltration Rate (m/hr)	0.222
Safety Factor	3.0
Conductivity (m/hr)	1000.0

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Report Title: Rainfall Analysis Criteria	Design: Infiltration Design			

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	0
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall		
FSR	Type: FSR	
Region	England And Wales	
M5-60 (mm)	20.8	
Ratio R	0.400	
Summer	☒	
Winter	☒	

Return Period

Return Period (years)	Increase Rainfall (%)
10.0	45.000

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880
2160	4320
2880	5760
4320	8640
5760	11520
7200	14400
8640	17280
10080	20160

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Report Details: Type: Stormwater Controls Summary Storm Phase: Phase	Design: Infiltration Design		





Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. Residant Volume (m³)	Max. Flooded Volume (m³)	Total Lost Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Half Drain Down Time (mins)	Percentage Available (%)
Porous Paving	FSR: 10 years: +45 %: 30 mins: Winter	49.114	49.037	0.223	0.147	9.9	5.429	0.000	7.466	0.0	0.000		56.914

Project: 144 St Ediths Marsh	Date: 19/06/2026			
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Status
OK



FOR MORE INFORMATION CONTACT US AT:

Enquiries@DixonCivils.com

01249 490813

www.DixonCivils.com