

FLOOD RISK ASSESSMENT

Proposed Ancillary Accommodation, The School House,
Little Bedwyn, Marlborough, Wiltshire on Behalf of Didi &
Ben Walker.

Date: December 2025
Issue No. 2



DOCUMENT ISSUE RECORD

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Project: Proposed Ancillary Accommodation, The School House, Little Bedwyn, Marlborough, Wiltshire

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1.0 INTRODUCTION

- 1.1 This *Flood Risk Assessment & Drainage Strategy* has been prepared by Cole Easdon Consultants Limited (CE) on behalf of Didi & Ben Walker in respect of proposed ancillary accommodation at The School House, Little Bedwyn, Marlborough, Wiltshire, SN8 3JG. Refer to CE Drawing 10474/500 Figure 1 [*Site Location Plan*] in Appendix 1.

Development Proposals

- 1.2 The proposals comprise the demolition of two existing sheds and the construction of a new annexe within the rear garden of the property. The proposed site layout is shown on Drawing No. 240309-25 [*Site Plan - Proposed*] (by Fowler Architecture & Planning) in Appendix 2.

Need for Study

- 1.3 The purpose of this assessment is to demonstrate that the development proposal outlined above can be satisfactorily accommodated without placing the development itself at risk and without worsening flood risk elsewhere. The study has been undertaken in accordance with *National Planning Policy Framework (NPPF)* and its associated *Planning Practice Guidance (PPG)*. A suitable drainage strategy discussing surface water runoff disposal solutions for the development is also included.
- 1.4 Accordingly, this study has been prepared to:
- assess flood risk to the development from fluvial sources;
 - assess flood risk to the development from other potential sources, including ditches, sewers, groundwater and overland flows;
 - ensure that the proposed development will fully comply with the requirements of the Environment Agency's (EA's) policy on the safeguarding of floodplains; and,
 - provide a surface water drainage strategy for the proposed development.

Local Policy

- 1.5 This assessment also demonstrates that the proposals meet the requirements of the Wiltshire Council Drainage and Betterment Strategy (June 2024), Surface water soakaways as a part of Sustainable drainage systems (SuDS), Wiltshire Council Groundwater Management Strategy (GWMS) (2016) and Wiltshire Council Strategic Flood Risk Assessment (SFRA, November 2024).
- 1.6 The development proposals must also adhere to guidance set out within National Policy

Framework (NPPF).

Scope of Study

- 1.7 In Section 2.0, we describe the characteristics of the proposed development site and surrounding area. In Section 3.0, we assess flood risk issues. The surface water drainage strategy is outlined in Sections 4.0. Conclusions are presented in Section 5.0.
- 1.8 The following resources have been used for this study:
- Defra's Multi-Agency Geographic Information for the Countryside (MAGIC) Map (accessed November 2025);
 - Flood Map for Planning – Environment Agency (EA, accessed November 2025)
 - Flood Map for Surface Water – Environment Agency (EA, accessed November 2025);
 - Geological Map – British Geological Survey (BGS, accessed November 2025);
 - Thames Water Public Sewer Records (accessed October 2025);
 - Revised Climate Change Allowances (EA, May 2022);
- 1.9 The following publicly available documents have also been reviewed as part of this assessment:
- Building Regulations 2015 – Approved Document H (Drainage and Waste Disposal);
 - CIRIA C753 The SuDS Manual (November 2015);
 - National Planning Policy Framework (January 2025);
 - Non-Statutory Technical Standards for Sustainable Drainage Systems (Defra, July 2025);
 - Rainfall Runoff Management for Developments (R&D Technical Report W5-074/A/TR/1 Revision E, Defra, June 2012);
 - Sustainable Drainage Systems (SuDS) Adoption (Wiltshire Council 2025);
 - Strategic Flood Risk Assessment (SFRA, November 2024);
 - Wiltshire Council Strategic Flood Risk Assessment Level 1 (JBA consulting, November 2024);
 - Wiltshire Council Groundwater Management Strategy 2016 (accessed October 2025); and,
 - Wiltshire Council Surface Water Soakaways - Developer Guidance Note (accessed October 2025)
- 1.10 The following abbreviations are used in this Report:
- AOD - Above Ordnance Datum;
 - BGL – Below Ground Level;
 - BGS – British Geological Survey;
 - EA – Environment Agency;
 - FEH – Flood Estimation Handbook;

-
- FMP – Flood Map for Planning;
 - Ha- Hectares;
 - L/S – Litres per Second;
 - NPPF – National Planning Policy Framework;
 - PPG- Planning Practice Guidance;
 - QBAR - Annual flood flow (return period of approximately 1:2.3 years);
 - SFRA – Strategic Flood Risk Assessment;
 - SuDS – Sustainable Drainage Systems; and,
 - TW – Thames Water.

2.0 THE EXISTING SITE

- 2.1 The development site is located in Little Bedwyn, some 220m to the north-west of the River Dun, within the north eastern part of the village. Refer to CE Figure 10474/500 Figure 1 [*Site Location Plan*] in Appendix 1.
- 2.2 The site covers an area of approximately 0.257 hectares (Ha) and comprises an existing residential dwelling, annex, 2 sheds, site entrance, gravel drive, pool and a pool house.
- 2.3 The site is bounded to the north by School Lane, with grassland beyond; to the east by greenfield land within the client's ownership with residential dwellings beyond, to the west by a tennis court belonging to a neighbouring dwelling and to the south by greenfield land.
- 2.4 Land use in the vicinity of the site is a mix of residential and rural.

Existing Topography

- 2.5 Topographical survey of the site indicates that the existing ground levels falls from northwest to southeast. Site levels vary between 126.08m AOD at the western site boundary, rising to a high point of 126.41m AOD. There is an existing grassed bank to the eastern side of the house which slopes downwards some 0.8 – 1m. Levels at the eastern boundary of the application site vary between 124.32m - 124.78mAOD. Refer to Drawing No. MFschoolhouseTOPO [*Existing Topographical Survey*] (by DANDO Surveying Ltd.) in Appendix 2.

Existing Sewers/Drains

- 2.6 Thames Water (TW) sewer records indicate that there is a 150mm diameter public foul sewer located within School Lane immediately to the north of the site. This sewer flows in an eastern direction away from the site. Refer to TWU Sewer Records in Appendix 3.

Nearby Watercourses/Drainage Features

- 2.7 The site is located some 220m to the north-west of the River Dun, a tributary of the River Kennet which flows in a north easterly direction through Little Bedwyn. Adjacent to the River on its eastern side, and flowing in parallel to the River through the village, is the Kennet & Avon Canal.

Existing Ground Conditions

- 2.8 British Geological Survey (BGS) records indicate that entirety of the site is underlain by Seaford Chalk Formation - Chalk. No superficial geology has been identified. Refer to Figure 2.1 below.

- 2.9 Defra's Multi-Agency Geographic Information for the Countryside (MAGIC) map shows that the site is located within a Groundwater vulnerability zone. The bedrock underlying the site is classified as Principal Aquifer. Refer to Figure 2.1 below



Figure 2.1: BGS Bedrock Geology Map
(Source: <https://geologyviewer.bgs.ac.uk>)

- 2.10 An intrusive investigation comprising infiltration testing in accordance with BRE DG365:2016 Digest has been undertaken on site by Soils Limited in November 2025. Two trial pits were dug at locations across the site (TPSK1 and TPSK2) to depths between 2.26m – 2.30m bgl. The investigation encountered Made Ground to depths of approx. 0.20 – 0.70m. Underlying this strata in TPSK1, Seaford Chalk Formation was encountered to 2.30m bgl. Within TPSK2, head deposits of sandy gravelly clay to 1.60m bgl was encountered, this was underlain by Seaford chalk to 2.26m bgl. This is consistent with findings from BGS mapping. Groundwater was not encountered within any test pit. Refer to Soakaway Investigation Report within Appendix 4.
- 2.11 Infiltration testing was undertaken in TPSK1 (2.30m pit depth) and TPSK2 (2.26m pit depth), in accordance with the BRE365 Soakaway Design Digest (2016).

- 2.12 Testing within both pits was successful indicating that infiltration potential exists across the site. The lowest tested infiltration rate observed was 2.60×10^{-4} m/s. Refer to infiltration test results within Table 2.1 below.

Table 2.1: Summary of Tested Infiltration Rates Onsite

Test Pit	Test Depth (mbgl)	Test 1	Test 2	Test 3
TPSK1	2.30	3.74×10^{-4} m/s	2.60×10^{-4} m/s	4.70×10^{-4} m/s
TPSK2	2.26	7.90×10^{-4} m/s	3.60×10^{-4} m/s	4.10×10^{-4} m/s

Existing Site Drainage

- 2.13 Topographical survey indicates a number of manholes, inspection chambers and a septic tank in the southern part of the garden. Further details of the existing surface water drainage system are unknown.
- 2.14 Equivalent greenfield runoff rates for the proposed impermeable areas (90m²) have been calculated using the FEH Statistical Method. Refer to Appendix 5 and Table 2.2 below.

Table 2.2: Summary of Greenfield Runoff Rates

Scenario	Storm Event			
	1:1 year	QBAR	1:30 year	1:100 year
Greenfield	0.03l/s	0.04l/s	0.09l/s	0.12l/s

3.0 FLOOD RISK ISSUES

- 3.1 This Section presents an assessment of flood risk to the development and includes recommended flood risk mitigation measures appropriate to the level of perceived risk. Flood risk issues and proposed mitigation measures are summarised in Table 3.1 below.

Historic Flooding

- 3.2 The EA's historic flood map does not indicate any historical flood events within Little Bedwyn.

Assessment of Flood Risk from Fluvial/Tidal Sources

- 3.3 The Flood Map for Planning (FMP) for the locality as produced by the EA indicates that the site lies within Flood Zone 1. The *NPPF* identifies Flood Zone 1 as low flood risk areas with an annual probability of flooding of less than a 1 in 1000 (0.1%) from rivers or sea. Refer to Figure 3.1 below.

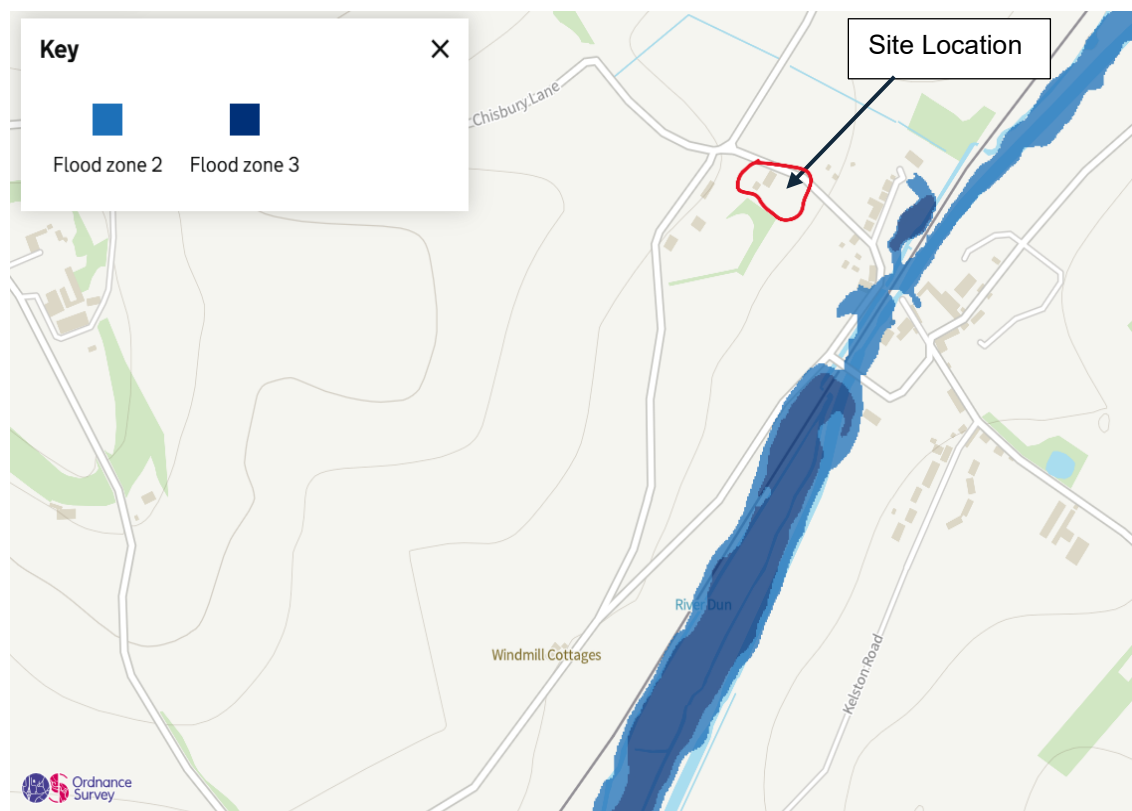


Figure 3.1: EA Flood Map for Planning
Source : <https://flood-map-for-planning.service.gov.uk/>

- 3.4 *NPPF Annex 3: Flood Risk Vulnerability Classification*) classifies the proposed residential site usage as 'More Vulnerable' development. In accordance with the *NPPF Practice Guidance Table 2 Flood risk vulnerability and flood zone 'incompatibility'*, More Vulnerable development is appropriate within Flood Zone 1. Flood risk from this source is therefore considered to be low.

Fluvial/Tidal Flood Risk Mitigation Measures

- 3.5 No mitigation is required

Assessment of Flood Risk from Existing Sewers/Drains

- 3.6 Thames Water sewer records indicate that there is 150mm diameter public foul sewer located within School Lane. This sewer flows in an eastern direction away from the site. The site is elevated above School Lane, which falls steeply in an easterly direction. Should flooding of the foul sewer occur, floodwaters would be contained within the highway boundary and flow away from the site in an easterly direction. Therefore, flood risk from this source is considered to be low.

Sewer/Drains Flood Risk Mitigation Measures

- 3.7 No mitigation is required

Assessment of Flood Risk from Overland Flow (Pluvial)

- 3.8 The EA surface water flood risk map for both the present day and 2040-2060 epoch indicates that the site is at 'Very Low risk' of surface water flooding. This means that the probability of surface water flooding occurring on site is lower than 0.1% each year. Refer to Figure 3.2 below. Therefore, flood risk is considered to be low.

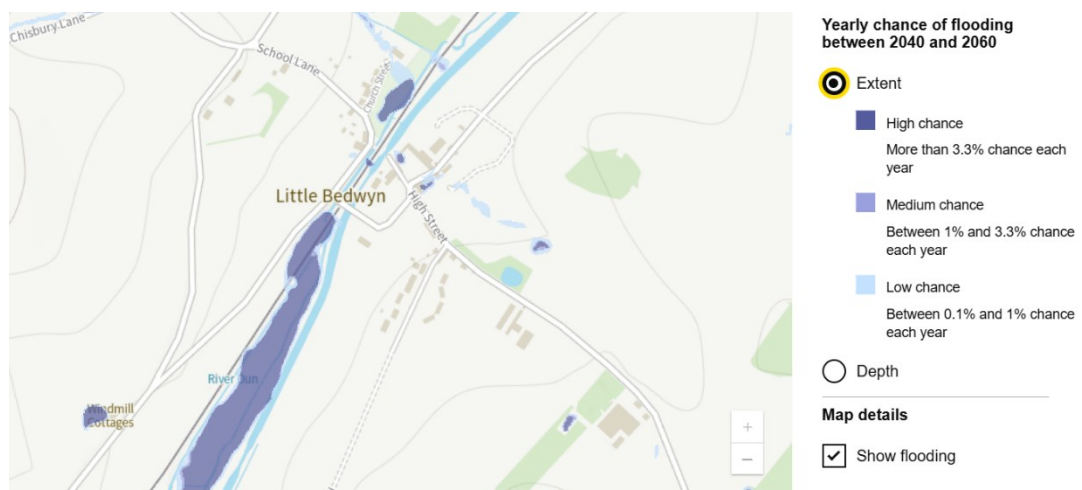


Figure 3.2: EA Surface Water Flood Map
Source : <https://flood-map-for-planning.service.gov.uk/>

Overland Flow Flood Risk Mitigation Measures

- 3.9 No mitigation measures are necessary, however Sustainable Drainage Systems (SuDS) will be incorporated within the proposals to reduce flood risk from surface water runoff generated within the new development. Further details are included in Section 4.0 of this Report.

Assessment of Flood Risk from Groundwater

- 3.10 The Wiltshire Council Strategic Flood Risk Assessment (November 2024) maps the site as within zones where there is a risk of groundwater emerging at the surface locally, with the eastern part of the site classified as within an area where groundwater may emerge and has the capacity to flow overland. The location of the proposed annexe at the western end of the site is more than 1m higher than the eastern part of the site.
- 3.11 Intrusive ground investigation undertaken on the site did not encounter any groundwater within the pits excavated to 2.3m depth. The site investigation was performed in November after a period of heavy rain. The site investigation identified that groundwater levels could still rise during the winter period from their anticipated annual minimum in September to the seasonal peak in March. However, as the location of the annexe is on high ground relative to the eastern extent of the site, groundwater emergence is unlikely to impact the development. The risk from groundwater is considered to be low.

Groundwater Flood Risk Mitigation Measures

- 3.12 The following precautionary measures to mitigate any residual risk are proposed:
- A concrete ground-supported floor slab with at least 100mm thickness is to be used.
 - The ground floor will be appropriately sealed to prevent potential groundwater ingress

- A waterproof render will be applied to the internal faces of the proposed external walls to a height of 600mm;
- All joints/gaps between walls and door frames will be sealed; and,
- All service pipes entering the building will be sealed with waterproof materials

Assessment of Flood Risk from Artificial Sources (reservoirs, canals etc)

- 3.13 EA mapping indicates that the site is not a risk of flooding from reservoirs. Refer Figure 3.3 below. The flood risk from the Kennet and Avon Canal is considered to be low due to the level difference between the site and Canal itself. Flood risk from artificial sources is considered to be low.

Artificial Sources Flood Risk Mitigation Measures

- 3.14 No mitigation measures are required.

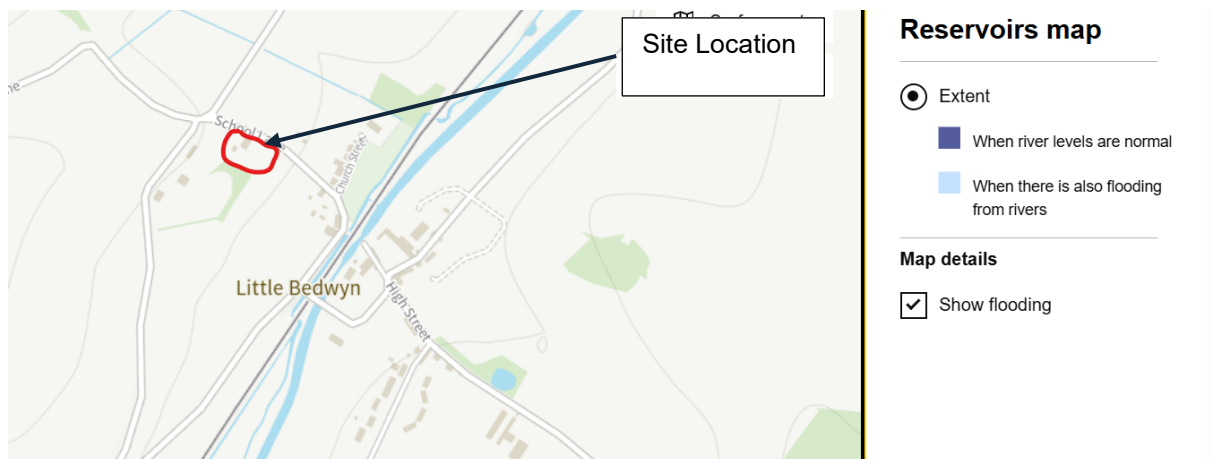


Figure 3.3: EA Flooding from Reservoirs
Source : <https://flood-map-for-planning.service.gov.uk/>

Table 3.1: Assessment of Flood Risk to the Development Site Arising from External Sources

Source of Potential Flooding to the Development Site	Flood Risk	Mitigation/Comments
Fluvial/Tidal	Low	The Flood Map for Planning shows that the site is located entirely within Flood Zone 1 (Low Risk). No mitigation required.
Overland Flow	Low	EA mapping indicates the site is at Very Low risk from surface water flooding. No mitigation required.
Public Sewers/Drains	Low	Thames Water Sewer records indicate that foul water sewer is located in the street outside the property, which is lower than the property boundary. No mitigation required.
Groundwater	Low	Intrusive ground investigation performed at the site did not encounter groundwater (to 2.3m bgl). The development location is on high ground relative to the lower eastern extent of the site. The following precautionary measures are proposed: ▪ A concrete ground-supported floor slab with at least 100mm thickness is to be used. ▪ The ground floor will be appropriately sealed to prevent potential groundwater ingress ▪ A waterproof render will be applied to the internal faces of the proposed external walls at a height of 600mm; ▪ All joints/gaps between walls and door frames will be sealed; and, ▪ All service pipes entering the building will be sealed with waterproof materials
Artificial Sources	Low	EA mapping confirms that the site is not at risk of flooding from reservoirs No mitigation required.

4.0 SURFACE WATER DRAINAGE STRATEGY

Refer to CE Drawing 10474/501 [*Proposed Drainage Strategy*] in Appendix 1.

- 4.1 In order to mitigate flood risk posed by post development runoff, adequate control measures will be provided within the site. This will ensure that flood risk is not increased elsewhere as a result of the development, in line with national and local guidance.

Drainage Hierarchy

- 4.2 The proposed drainage strategy for the site has been prepared according to the surface water drainage hierarchy set out in *National Standards for Sustainable Drainage Systems (DEFRA, June 2025)*, as follows. Also, refer to Table 4.1 below.
1. Collected for non-potable uses;
 2. Infiltration to ground;
 3. Discharged to an above ground surface water body;
 4. Discharged to a surface water sewer, or another piped surface water drainage system
 5. Discharged to a combined sewer.

Non-potable Uses

- 4.3 A water butt is proposed for irrigation purposes.

Infiltration Potential

- 4.4 Intrusive investigation indicated that ground conditions at the site comprise made ground to depths of approx. 0.20 – 0.70m, underlain by chalk to depth. Superficial head deposits of sandy gravelly clay were encountered in TPSK2 to 1.60m bgl, underlain by chalk. Groundwater was not encountered within either test pit.
- 4.5 BRE365 compliant infiltration testing was conducted on site within two test pits. Testing has confirmed that infiltration potential exists within the site. Therefore, the lowest tested infiltration rate of 2.60×10^{-4} m/s has been used within the calculations.

Table 4.1: Review of SuDS Components in accordance with the Drainage Hierarchy

SuDS Technique	Proposed	Not proposed	Reason
Store rainwater for later use	X		Water butt to be utilised
Use infiltration techniques	X		Infiltration feasible and confirmed via intrusive investigation
Discharge to an above ground surface water body		X	Connection not sought. Infiltration proposed
Discharge to a surface water sewer, or another piped surface water drainage system		X	Connection not sought. Infiltration proposed
Discharge to a combined sewer		X	Connection not sought. Infiltration proposed

Urban Creep

- 4.6 In accordance with LASOO guidance, 10 % urban creep allowance has been considered in the drainage calculations.

Sustainable Drainage Systems (SuDS)

- 4.7 Development proposals will introduce a total of 0.0090ha. Sufficient storage to infiltrate runoff for all storms up to and including the 1:100 year + 40% climate change event will be provided in the form of a below ground cellular soakaway. As all drainage is via infiltration, suitable interception benefits in line with the National Standards will be provided.
- 4.8 Sufficient storage can be provided within a cellular soakaway some 2m wide and 4m long and 0.4m deep. Calculations indicate that 2.88m³ of storage is required within the soakaway for the 1:100 year + 40% rainfall event. The proposed soakaway should be wholly founded in the permeable, chalk strata.
- 4.9 During the 1:100 year +40% climate change event the half drain time for the tank is 20 minutes Refer to Calculations in Appendix 5.
- 4.10 The proposed SuDS have been designed to accommodate and dispose of runoff from all storms up to and including the 1:100-year storm with a 40% allowance for future climate change. A factor of safety of 2 has also been used in accordance with the guidance set out in the National Standards.

Design Exceedance

- 4.11 In the event of an exceedance event, or blockage, exceedance flows will follow the existing topography of the site. Design exceedance flows would flow in an easterly direction towards

existing greenfield land, which is in ownership of the client, without impacting existing or proposed buildings.

Water Quality

- 4.12 Catchpits will be used to capture any sediment/leaf litter from the roof. The soakaway will only receive roof runoff which is deemed unpolluted and therefore no additional water quality treatment is required. Therefore, the proposed drainage system will provide sufficient water quality treatment to the development proposals.

Adoption & Maintenance

- 4.13 The cellular soakaway and the associated drainage network onsite will be maintained by the site owner. A draft Maintenance Schedule is outlined below and summarised in Table 4.2.

Cellular Soakaway

- 4.14 The design of soakaways should include monitoring points where the water level in the system can be observed or measured. This can either be via an inspection well or upstream catch pit. The useful life and effective operation of an infiltration component is related to the frequency of maintenance and the risk of sediment being introduced into the system.

Pipework and Catchpits

- 4.15 It is not envisaged that silt build up within the pipework systems will require a rigorous maintenance regime so long as silt is removed from upstream catchpits on a regular basis. Notwithstanding this, a suitable maintenance regime for the systems will comprise of routine inspection (every six months) and silt removal (as necessary).

Table 4.2: Draft Maintenance Schedule for Proposed Drainage Infrastructure

Drainage Element	Schedule	Maintenance Requirement	Frequency
Cellular Soakaway	Regular	- Inspect for sediment and debris in pre-treatment devices and floor of inspection tube or chamber - Cleaning of gutters and any filters and downpipes - Trimming any roots that may be causing blockages	Annually, or as required based on inspection
	Occasional	Remove sediment and debris from pre-treatment components and floor of inspection tube or chamber	As required
	Remedial	- Reconstruct soakaways and/or replace or clean fill, if performance deteriorates or failure occurs - Replacement of clogged geotextile	As required
	Monitoring	- Inspect silt traps and note sediment accumulation rate - Check soakaways to ensure emptying is occurring	- Monthly in the first year and then 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

Note: In addition to the above maintenance requirements, it is recommended that all drainage elements are inspected:

- Following the first storm event
- Monthly for the first 3 months following commissioning

5.0 DISCUSSION AND CONCLUSIONS

- 5.1 Flood risk to the proposed development from various sources, such as fluvial, sewers, groundwater, reservoirs and overland flow has been considered in this study. Flood risk from all sources is considered to be low. The following mitigation has been proposed as a precautionary measure in respect of residual groundwater flood risk:
- A concrete ground-supported floor slab with at least 100mm thickness is to be used.
 - The ground floor will be appropriately sealed to prevent potential groundwater ingress
 - A waterproof render will be applied to the internal faces of the proposed external walls at a height of 600mm;
 - All joints/gaps between walls and door frames will be sealed; and,
 - All service pipes entering the building will be sealed with waterproof materials
- 5.2 The surface water drainage strategy for the site has been prepared according to the drainage discharge hierarchy set out in *National Standards for Sustainable Drainage Systems*. An intrusive site investigation concluded that the underlying strata could support infiltration SuDS.
- 5.3 Post development runoff will be infiltrated into the ground via cellular soakaway in the rear garden. The soakaway should be wholly founded within permeable strata.
- 5.4 In the event of an exceedance event, or blockage, exceedance flows will follow the existing topography of the site. Design exceedance flows would flow in an easterly direction towards existing greenfield land, which is in ownership of the client, without impacting existing or proposed buildings.
- 5.5 All on site drainage systems will remain private and will be the responsibility of the site owner. All SuDS devices will be constructed and maintained in accordance with *The SuDS Manual* and/or manufacturer's specification.
- 5.6 Catchpits will be used to capture any sediment/leaf litter from the roof. The soakaway will only receive roof runoff which is deemed unpolluted and therefore no additional water quality treatment is required.
- 5.7 This study has been undertaken in accordance with the principles of the *NPPF* document. We conclude that providing the development adheres to the conditions advised within this Report,

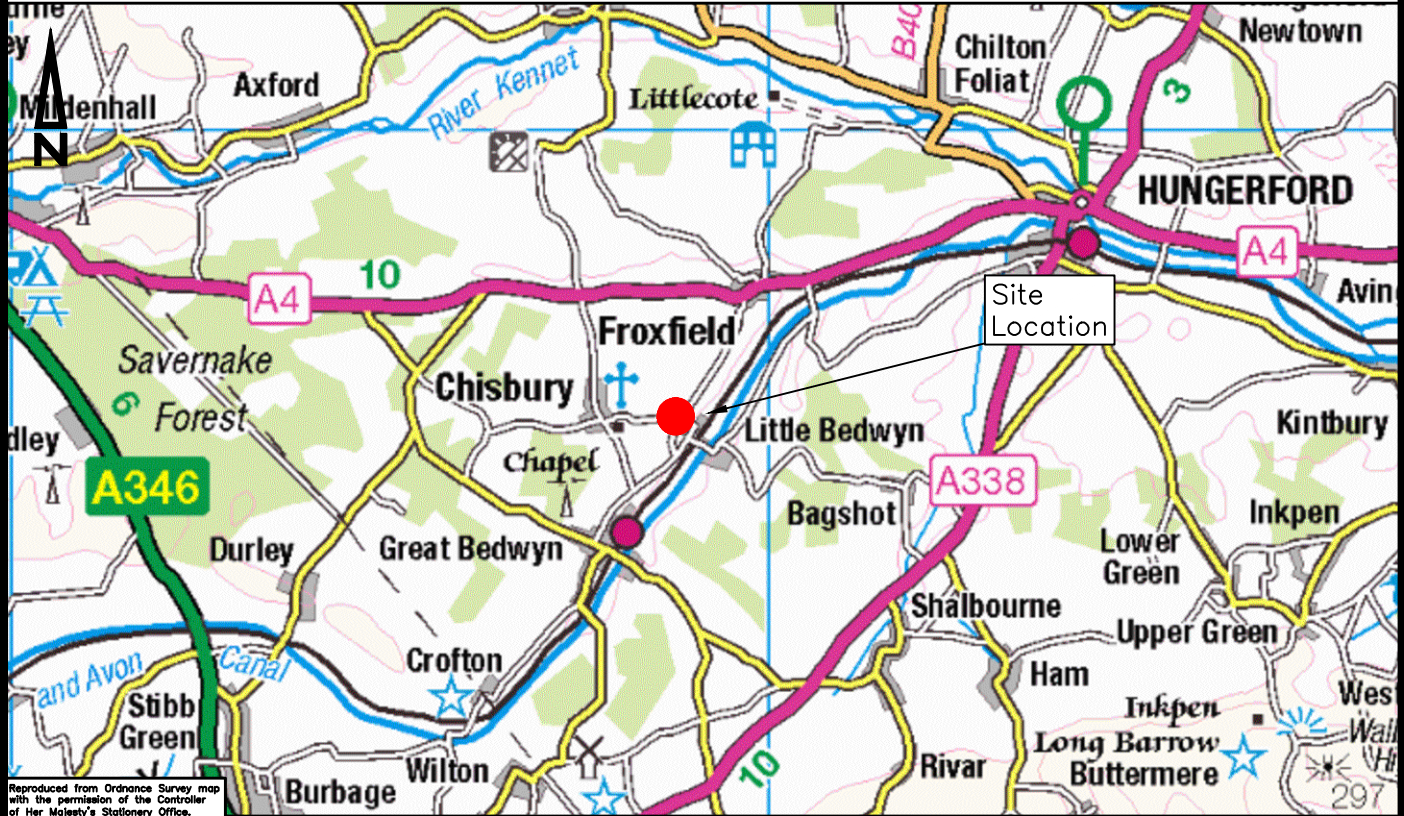
the proposals can be accommodated without increasing flood risk within the locality in accordance with objectives set by Central Government and the EA/LLFA.

Cole Easdon Consultants Limited
December 2025

Appendix 1



Scale: 1:5,000



Scale: 1:100,000

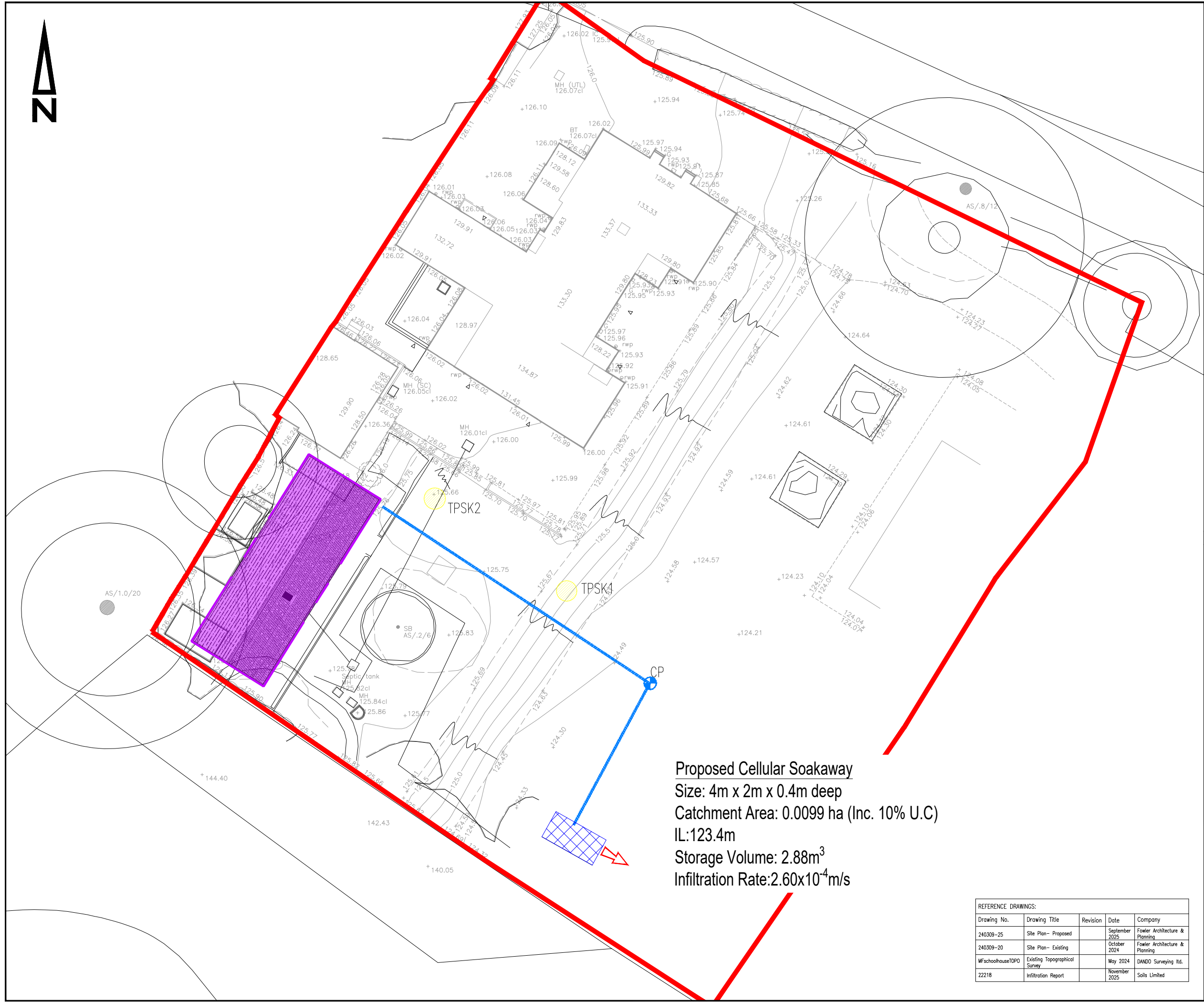
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Job Title: Proposed Development School House, Little Bedwyn Marlborough, Wiltshire		Client: Didi & Ben Walker		Drawing Status: CONSTRUCTION AT CLIENT AND/OR CONTRACTOR RISK FOR COMMENT FOR PLANNING FOR TENDER FOR APPROVAL FOR CONSTRUCTION AS BUILT	
Drawing Title: Site Location Plan		Drawn By AW	Date Drawn October 2025	Scale As Shown (A4)	
		Checked By JP	Drawing No. 10474/500 Figure 1		Revision -



- KEY:
- Site Boundary
 - Proposed Impermeable Area (90m2, 99m2 inc UC)
 - Proposed Surface Water Pipework
 - Design Exceedance Route
 - Proposed Soakaway
 - CP Catch Pit Manhole
 - TPSK1 TPSK2 Trial Pit Location

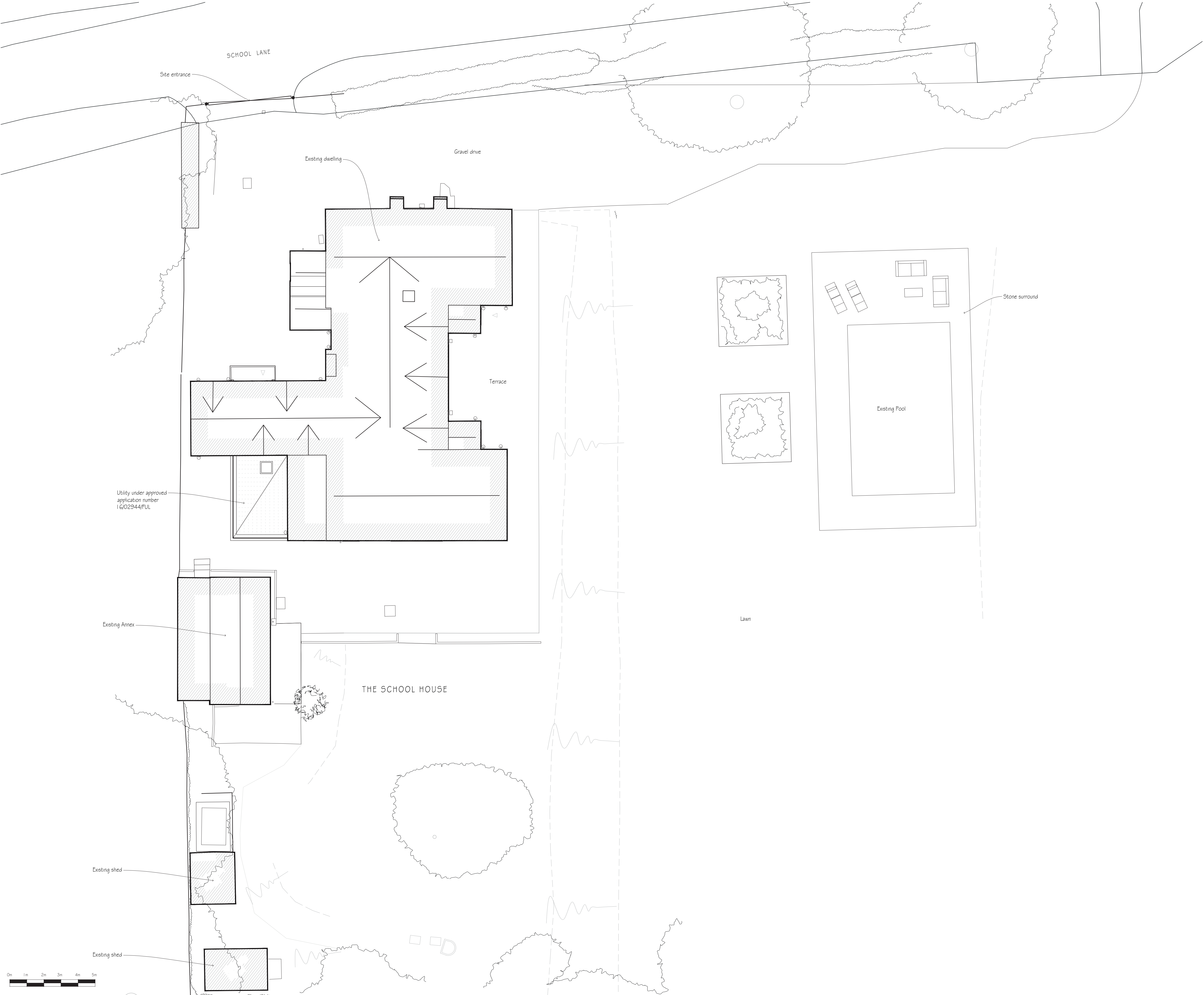
- Notes
- All levels are in metres above ordnance datum
 - Drainage strategy is preliminary and subject to detailed design
 - TP Locations are approximate based upon report by Soils Ltd

No.	By	Date	Revision	Details
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01793 619 965 cec@ColeEasdon.com www.ColeEasdon.com				
Client Didi & Ben Walker				
Job Title Proposed Drainage Strategy				
Drawing Title Proposed Ancillary Accommodation The School House Little Bedwyn Marlborough, Wiltshire				
Drawing Status FOR COMMENT FOR PLANNING FOR TENDER FOR APPROVAL FOR CONSTRUCTION AS BUILT				
CONSTRUCTION AT CLIENT / CONTRACTOR RISK				
Designed by: AW		Drawn by: AW		Checked by: JP
Date: December 2025		Scale: 1:250 @ A3		
Dwg. No. 10474/501				Rev.

Proposed Cellular Soakaway
Size: 4m x 2m x 0.4m deep
Catchment Area: 0.0099 ha (Inc. 10% U.C)
IL:123.4m
Storage Volume: 2.88m³
Infiltration Rate:2.60x10⁻⁴m/s

REFERENCE DRAWINGS:				
Drawing No.	Drawing Title	Revision	Date	Company
240309-25	Site Plan- Proposed		September 2025	Fowler Architecture & Planning
240309-20	Site Plan- Existing		October 2024	Fowler Architecture & Planning
MFschoolhouseTOPO	Existing Topographical Survey		May 2024	DANDO Surveying Ltd.
22218	Infiltration Report		November 2025	Soils Limited

Appendix 2



revisions	initial	date
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Contractors, Sub Contractors and Suppliers are to check all relevant dimensions and levels of site and buildings before commencing any shop drawings or building work.

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project
THE SCHOOL HOUSE
Little Bedwyn
Wiltshire
SN8 3JG

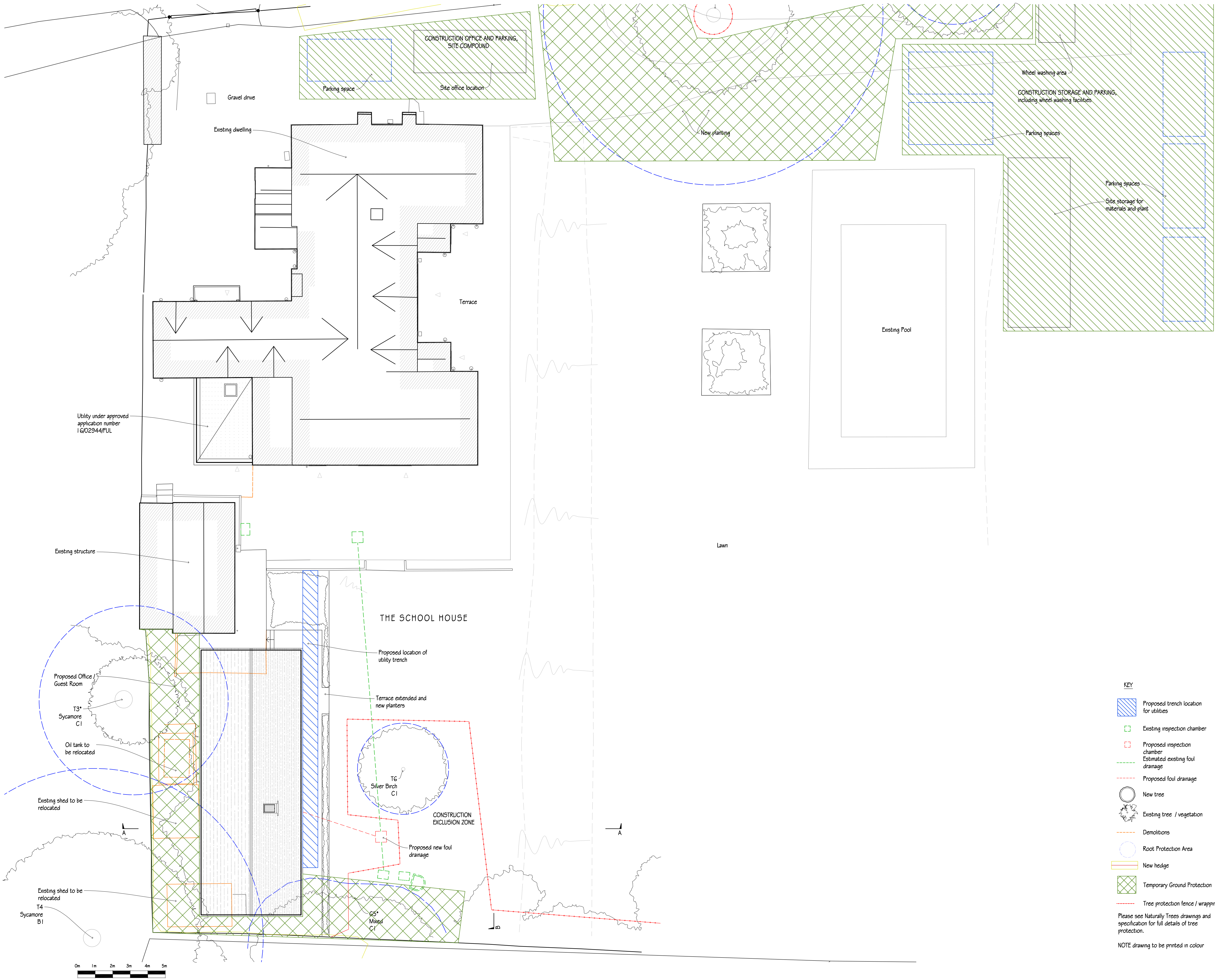
drawing
**Site Plan -
Existing**

scale	drawn by	date
1:100 @A1	EG	Oct '24

240309-20	
drawing no	rev



39 High Street
Pewsey
Wiltshire
SN9 5AF
tel (01672) 569444
enquiries@faap.co.uk



SITE PLAN

- KEY**
- Proposed trench location for utilities
 - Existing inspection chamber
 - Proposed inspection chamber
 - Estimated existing foul drainage
 - Proposed foul drainage
 - New tree
 - Existing tree / vegetation
 - Demolitions
 - Root Protection Area
 - New hedge
 - Temporary Ground Protection
 - Tree protection fence / wrapping
- Please see Naturally Trees drawings and specification for full details of tree protection.
- NOTE drawing to be printed in colour

revisions initial date

Contractors, Sub Contractors and Suppliers are to check all relevant dimensions and levels of site and buildings before commencing any shop drawings or building work.

This drawing is copyright and may not be reproduced in any part of form without the written consent of Fowler Architecture and Planning

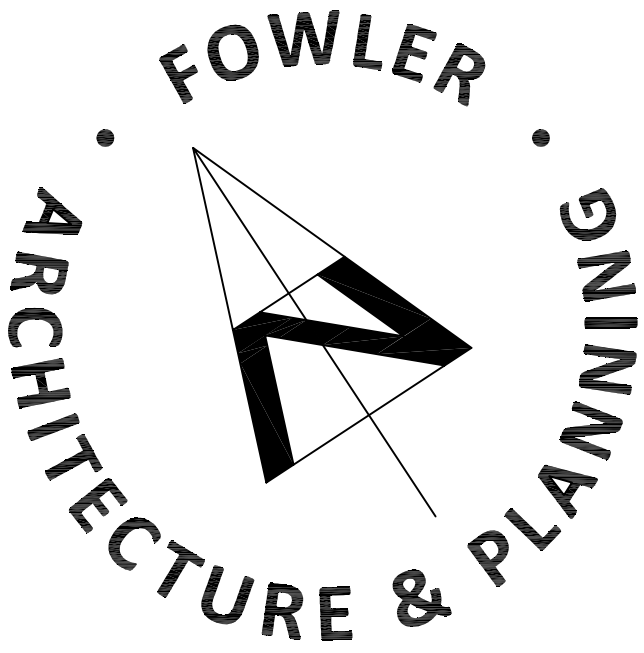
project
THE SCHOOL HOUSE
Little Bedwyn
Wiltshire
SN8 3JG

planning

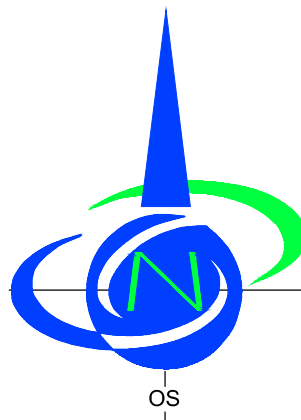
drawing
Site Plan - Proposed

scale 1:100 @A1 drawn by SK date Sept 25

240309-25
drawing no. rev



39 High Street
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N166200

N166200

N166175

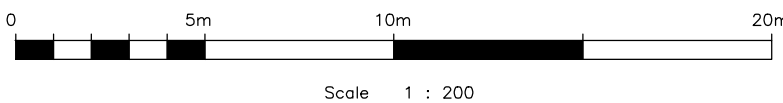
N166175

N166150

N166150

N166125

N166125



Tree Abbreviations

ASH	Ash	LP	London Plane
BAY	Bay	MAP	Maple
BEE	Beech	OAK	Oak
CB	Copper Beech	POP	Poplar
CED	Cedar	RM	Red Maple
CH	Cherry	RW	Rodwood
CON	Coniferous	SB	Silver Birch
EUC	Eucalyptus	SER	Service Tree
FR	Fruit	SP	Scots Pine
HAW	Hawthorn	SYC	Sycamore
HAZ	Hazel	WAL	Walnut
HD	Horse Chestnut	WIL	Willow
HOL	Holly	WP	Weeping Willow
LAB	Laburnum	YEW	Yew
LAU	Laurel		
LI	Lime		

Trees denoted with "approx" have been surveyed by remote methods and therefore their positions & dimensions cannot be guaranteed.

Tree Dimensions (average)	AS - As shown by red line
Spread/Trunk Dia/Height	UTS - Unable to survey

Key

AV	Air Valve	LP	Lamp Post
BL	Bollard	M	Metre
BM	Bench Mark	MH	Manhole Cover
BP	Boundary Point	MK	Marker
BT	BT Cover	MS	Milestone
CATV	Cable Television Cover	RG	Ridge Level
cab	Cabinet	RS	Road Sign
cl	Cover Level	rwp	Rain Water Pipe
EP	Electric Power Pole	SC	Stop Cock
FH	Fire Hydrant	Str	Strainer
FL	Floor Level	SV	Stop Valve
FP	Fence Post	swp	Soil Vent Pipe
FWS	Foul Water Sewer	TH	Threshold Level
G	Gully	TL	Traffic Light
GP	Gate Post	TP	Telephone Pole
GV	Gas Valve	UTL	Unable To Lift
IC	Inspection Chamber	VP	Vent Pipe
il	Invert Level	WM	Water Meter
KO	Kerb Outlet	WO	Wash Out

Buildings & Walls	Double Gates
Glass Roofed	Single Gate

Linetypes

Bank	Building
Drop Kerb	Channel
Electric	Fence
Foliage	FWS (Estimated Size from Surface)
Grid Cross	Hedge
Kerb	Manhole
Pipe	Ridge
SWS (Estimated Size from Surface)	Telephone
Track/Path	Tree Canopy
Verge	Water line
Wall	

Coordinate System

This survey has been oriented to the O.S. National Grid (OSGB36) via a global position system and the O.S. Active Network (OS Net) OSGB36. True OSGB36 coordinates have been established at STN2 E 428945.509, N 166174.270 and a further OSGB36 point established to create a true O.S. bearing for angle orientation. All levels are based on O.S.Datum. A scale factor of 1:1 has been applied to the survey and therefore the coordinate system must be considered arbitrary.



Land & Measured Building Surveyors

27-29 New Street
Charfield
South Glos.
GL12 8ES
Tel: 01453 845017
Tel: 01453 845360
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Project Name:
The School House
Little Bedwyn, Wiltshire, SN8 3JG

Drawing Title:
Existing Topographical Survey

Client:
Fowler Architecture & Planning

Date: 21st May 2024
Scale: 1:200 @ A1

Grid Orientation
North GPS
Sheet ID
MFschoolhouseTOPO
Rev
None

Site Level Datum
OS GNS
Surveyed By
BS
Drawn By
VM



Appendix 3

Catherine Spanner
UNIT 1, YORK HOUSE, HINDLE WAY
SWINDON
SN3 3RB

Search address supplied The School House
Little Bedwyn
Marlborough
SN8 3JG

Your reference (10474) School House Wiltshire

Our reference ALS/ALS Standard/2025_5231731

Search date 2 October 2025

Keeping you up-to-date

Notification of price changes

We're changing our report prices from 4th June 2025. The price will increase by 3.5% based on Retail Price Index (RPI).

Find our new prices on our website thameswater.co.uk/property-searches

Any Questions? We're happy to talk through the changes with you – give our Property Searches team a call on 0800 009 4540 .



Thames Water Utilities Ltd
Property Searches,
Clearwater Court, Vastern Road, Reading RG1 8DB



property.searches@thameswater.co.uk
thameswater.co.uk/propertysearches



0800 009 4540

Search address supplied: The School House, Little Bedwyn, Marlborough, SN8 3JG

Dear Sir / Madam

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

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

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

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

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

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

Contact Us

If you have any further queries regarding this enquiry please feel free to contact a member of the team on 0800 009 4540, or use the contact details below:

Thames Water Utilities Ltd
Property Searches
Clearwater Court
Vastern Road
Reading
RG1 8DB

Email: property.searches@thameswater.co.uk

Web: thameswater.co.uk/propertysearches

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. The public sewer map relates only to sewerage apparatus of Thames Water Utilities Ltd, it does not disclose details of cables and or communications equipment that may be running through or around such apparatus. The sewer level information contained in this response represents all of the level data available in our existing records. Should you require any further Information, please refer to the relevant section within the 'Further Contacts' page found later in this document.

For your guidance:

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

Clean Water Services

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

Enclosed is a map showing the approximate positions of our water mains and associated apparatus. Please note that records are not kept of the positions of individual domestic supplies. For your information, there will be a pressure of at least 10m head at the outside stop valve. If you would like to know the static pressure, please contact our Customer Centre on 0800 316 9800. The Customer Centre can also arrange for a full flow and pressure test to be carried out for a fee.



For your guidance:

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

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. You can do this by emailing customer.feedback@thameswater.co.uk with the email subject header 'Enquiry – TWOSA', along with details of the request.

If you have any questions regarding sewer connections, budget estimates, diversions or building over 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

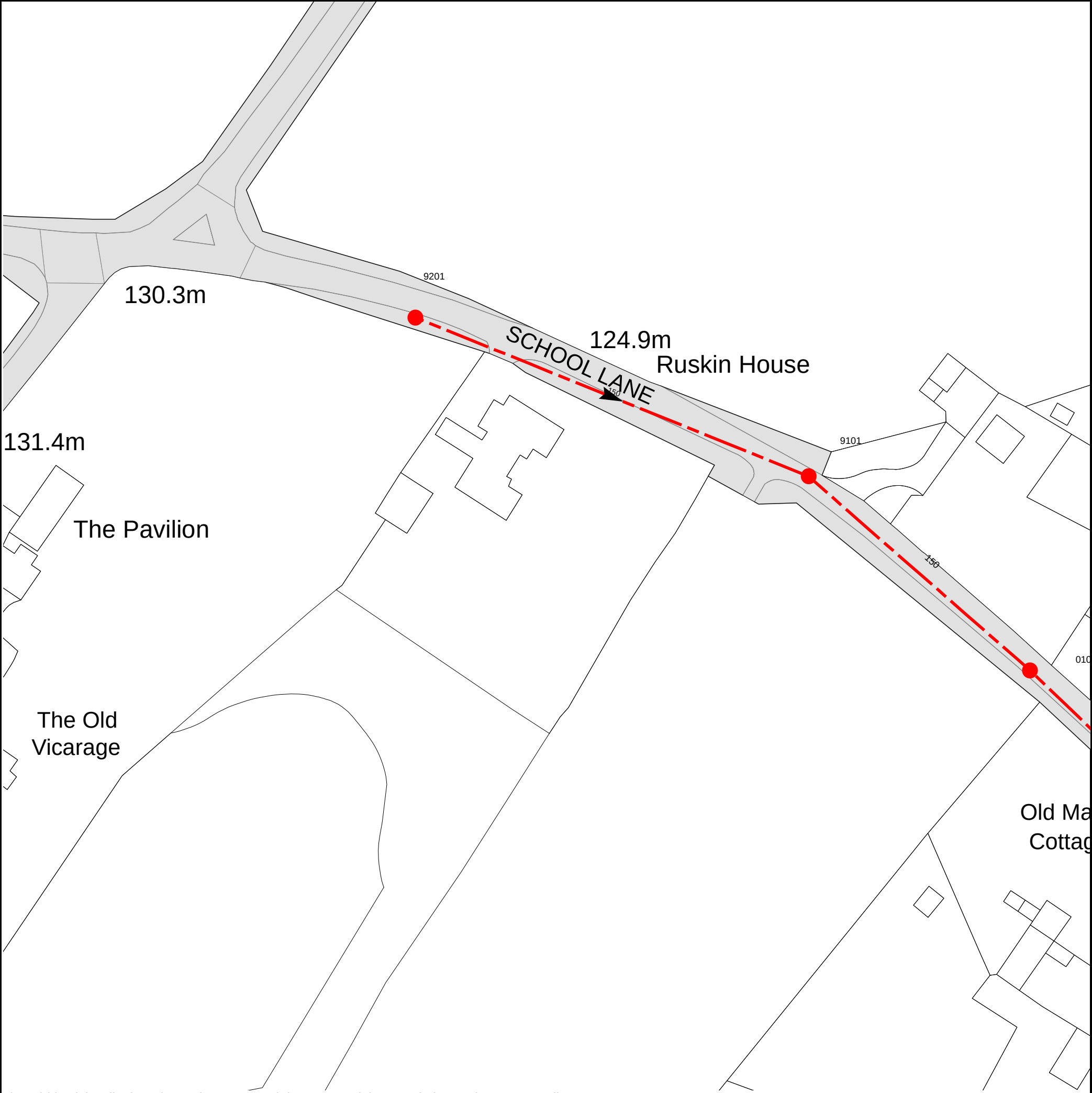
Tel: 0800 009 3921
Email: developer.services@thameswater.co.uk

Clean Water queries

Should you require any advice concerning clean water 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



The width of the displayed area is 200 m and the centre of the map is located at OS coordinates 428933,166156

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 (2024) with the Sanction of the controller of H.M. Stationery Office, License no. AC0000849556 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
9101	120.75	119.15
9201	127.14	125.59
0101	115.93	114.53
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.		



Asset Location Search - Sewer Key

Public Sewer Types (Operated and maintained by Thames Water)

	Foul Sewer: A sewer designed to convey waste water from domestic and industrial sources to a treatment works.
	Surface Water Sewer: A sewer designed to convey surface water (e.g. rain water from roofs, yards and car parks) to rivers or watercourses.
	Combined Sewer: A sewer designed to convey both waste water and surface water from domestic and industrial sources to a treatment works.
	Storm Sewer
	Sludge Sewer
	Foul Trunk Sewer
	Surface Trunk Sewer
	Combined Trunk Sewer
	Foul Rising Main
	Surface Water Rising Main
	Combined Rising Main
	Vacuum
	Thames Water Proposed
	Vent Pipe
	Gallery

Other Sewer Types (Not operated and maintained by Thames Water)

	Sewer		Culverted Watercourse
	Proposed		Decommissioned Sewer
	Content of this drainage network is currently unknown		Ownership of this drainage network is currently unknown

Notes:

- 1) All levels associated with the plans are to Ordnance Datum Newlyn.
- 2) All measurements on the plan are metric.
- 3) Arrows (on gravity fed sewers) or flecks (on rising mains) indicate the direction of flow.
- 4) Most private pipes are not shown on our plans, as in the past, this information has not been recorded.

Sewer Fittings

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

	Air Valve		Meter
	Dam Chase		Vent
	Fitting		

Operational Controls

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

	Ancillary		Drop Pipe
	Control Valve		Weir

End Items

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

	Inlet		Outfall
	Undefined End		

Other Symbols

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

	Change of Characteristic Indicator		Public / Private Pumping Station
	Invert Level		Summit

Areas

Lines denoting areas of underground surveys, etc.

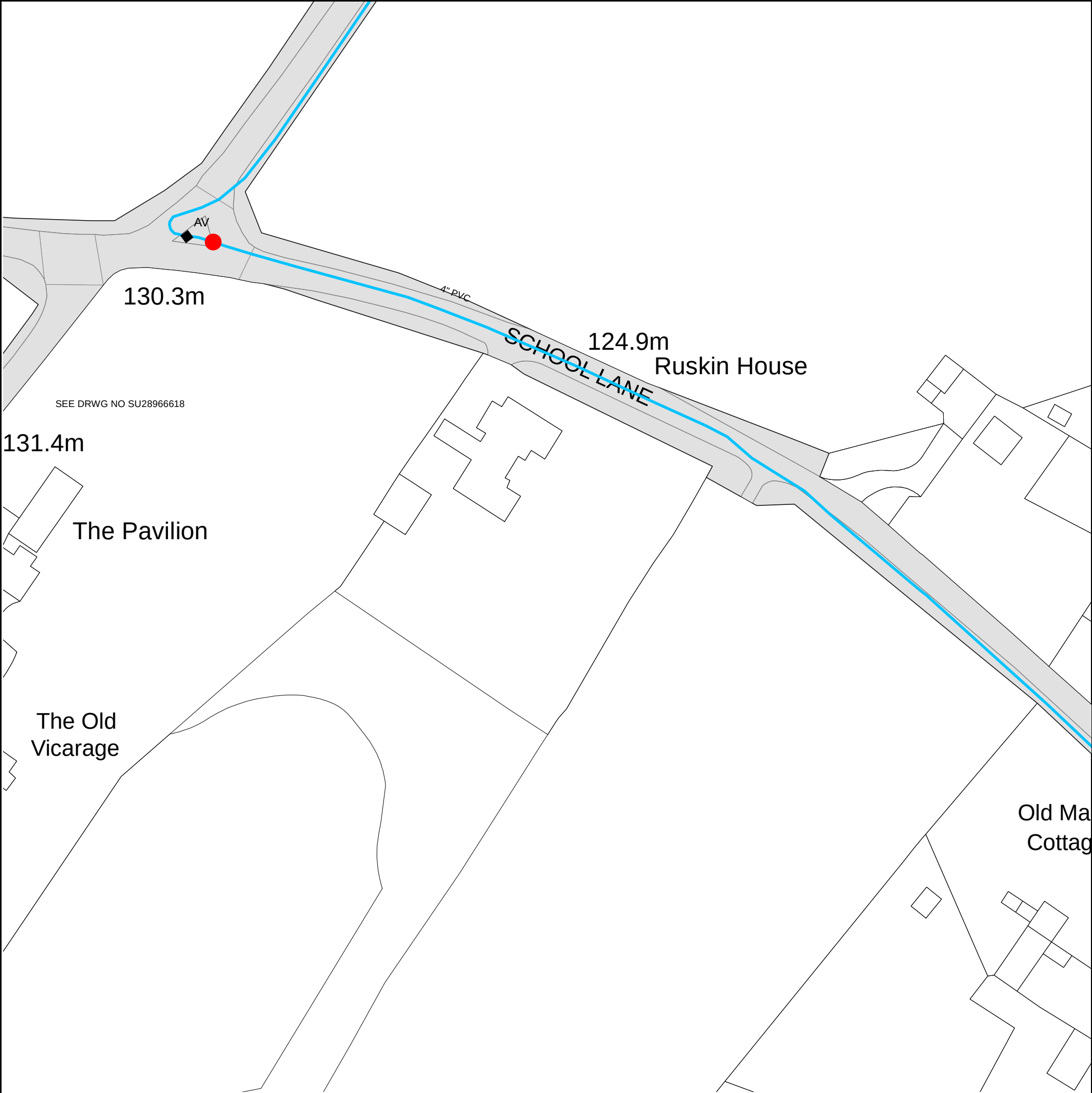
	Agreement
	Chamber
	Operational Site

Ducts or Crossings

	Casement	Ducts may contain high voltage cables. Please check with Thames Water.
	Conduit Bridge	
	Subway	
	Tunnel	

5) 'na' or '0' on a manhole indicates that data is unavailable.

6) The text appearing alongside a sewer line indicates the internal diameter of the pipe in millimeters. Text next to a manhole indicates the manhole reference number and should not be taken as a measurement. If you are unsure about any text or symbology, please contact Property Searches on 0800 009 4540.



The width of the displayed area is 200 m and the centre of the map is located at OS coordinates 428933, 166156.

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 (2024) with the Sanction of the controller of H.M. Stationery Office, License no. AC0000849556 Crown Copyright Reserved.



Asset Location Search - Water Key

Water Pipes (Operated & Maintained by Thames Water)

- 4"** **Distribution Main:** The most common pipe shown on water maps. With few exceptions, domestic connections are only made to distribution mains.
- 16"** **Trunk Main:** A main carrying water from a source of supply to a treatment plant or reservoir, or from one treatment plant or reservoir to another. Also a main transferring water in bulk to smaller water mains used for supplying individual customers.
- 3" SUPPLY** **Supply Main:** A supply main indicates that the water main is used as a supply for a single property or group of properties.
- 3" FIRE** **Fire Main:** Where a pipe is used as a fire supply, the word FIRE will be displayed along the pipe.
- 3" METERED** **Metered Pipe:** A metered main indicates that the pipe in question supplies water for a single property or group of properties and that quantity of water passing through the pipe is metered even though there may be no meter symbol shown.
- Transmission Tunnel:** A very large diameter water pipe. Most tunnels are buried very deep underground. These pipes are not expected to affect the structural integrity of buildings shown on the map provided.
- Proposed Main:** A main that is still in the planning stages or in the process of being laid. More details of the proposed main and its reference number are generally included near the main.

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

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
- Casement:** Ducts may contain high voltage cables. Please check with Thames Water.

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.

Appendix 4



Infiltration Report

at

Little Bedwyn, Marlborough, Wiltshire SN8 3JG

for

RW Armstrong

Reference: 22218/IR Rev1.0
November 2025

Control Document

Project

Little Bedwyn, Marlborough, Wiltshire SN8 3JG

Document Type

Infiltration Report

Document Reference

22218/IR Rev 1.0

Document Status

Final

Date

November 2025

Prepared by

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First check by

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Second check by

Eur Ing R B Higginson BSc, PGDip, CEng, MICE, FGS

This is not a valid document for use in the design of the project unless it is titled Final in the document status box.

Current regulations and good practice were used in the preparation of this report. The recommendations given in this report must be reviewed by an appropriately qualified person at the time of preparation of the scheme design to ensure that any recommendations given remain valid in light of changes in regulation and practice, or additional information obtained regarding the site.



Commission

This document comprises the Infiltration Report (IR) and incorporates the results, discussion, and conclusions to this intrusive works. General site data is recorded below:

Commission Record	
Client	RW Armstrong
Site Name	Little Bedwyn, Marlborough, Wiltshire SN8 3JG
Grid Reference	SU 289 661
Soils Limited Quotation Ref	Q30578_rev1.1, dated 29 th October 2025
Clients Purchase Order	I25029/66 dated 31 st October 2025

The record of revision to this document is presented below:

Record Of Revisions		
Revision	Date	Reason
1.0	November 2025	Original to the Client

Note(s): The latest revised document supersedes all previous revisions of the IR produced by Soils Limited.

Limitations and Disclaimers

The report was prepared solely for the brief described in Section 1.1 of this report.

The contents, recommendations and advice given in the report are subject to the Terms and Conditions given in Soils Limited's Quotation.

Soils Limited disclaims any responsibility to the Client and others in respect of any matters outside the scope of the above.

This report has been prepared by Soils Limited, with all reasonable skill, care and diligence within the terms of the Contract with the Client, incorporation of our General Conditions of Contract of Business and taking into account the resources devoted to us by agreement with the Client.

The report is personal and confidential to the Client and Soils Limited accept no responsibility of whatever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report wholly at its own risk.

The Client may not assign the benefit of the report or any part to any third party without the written consent of Soils Limited.

The ground is a product of continuing natural and artificial processes. As a result, the ground will exhibit a variety of characteristics that vary from place to place across a site, and also with time. Whilst a ground investigation will mitigate to a greater or lesser degree against the resulting risk from variation, the risks cannot be eliminated.

The investigation was prepared for the sole benefit of the Client in accordance with their brief. As such these do not necessarily address all aspects of ground behaviour at the site.

Current regulations and good practice were used in the preparation of this report.

If the term "competent person" is used in this report or any Soils Limited document, it means an engineering geologist or civil engineer with a minimum of three years post graduate experience in the understanding and application of the appropriate codes of practice.

Within the report reference to ground level relates to the site level at the time of the investigation, unless otherwise stated.

Exploratory hole is a generic term used to describe a method of direct investigation. The term trial pit, borehole or window sample borehole implies the specific technique used to produce an exploratory hole.

Ownership of copyright of all printed material including reports, survey data, drawings, laboratory test results, trial pit and borehole log sheets, including drillers log sheets

remains with Soils Limited. License is for the sole use of the client and may not be assigned, transferred or given to a third party. This license is only valid once we have been paid in full for this engagement. In the event of non-payment for our services, we reserve the right to retract the license for all project data, preventing their use and any reliance upon such data by the client or any other third party. We may also contact parties other than the client to notify them of this retraction.

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Appendix C Infiltration Testing Data

Appendix C.1 Infiltration Data

Section I Introduction

I.1 Objective of Investigation

The Client commissioned Soils Limited to conduct an infiltration investigation and prepare an Infiltration Report, providing ground conditions and test results to inform drainage design for the development.

No preliminary investigation, environmental / geotechnical testing or interpretive reporting was commissioned as part of this investigation.

I.2 Site Description

At the time of the investigation (November 2025), the site was a rectangular-shaped plot that comprised a two-storey dwelling located on the south-west side of the site. A swimming pool was situated to the south of the dwelling.

Gravel access roads were located to the north-east of the site. The site was predominantly covered with grass, with concrete surfacing present around the existing house.

A cluster of mature and semi-mature trees was located along the south-western boundary, and two mature trees were located along the eastern boundary.

The site sloped downwards from north to south at an angle of approximately 3.5°.

The site location plan is given in Figure 1. An aerial photograph of the site and its close environs has been included in Figure 2.

I.3 Proposed Development

At the time of the investigation, no development proposals were provided by the Client.

I.4 Anticipated Geology

The 1:50,000 BGS map showed the site to be located upon the bedrock Seaford Chalk Formation with overlying Head deposits.

I.4.1 Head Deposits

Head Deposits are drifts produced by solifluxion, the downslope movement of debris outwash during the periglacial period, and characteristically comprise poorly sorted sands, gravels and chalk of local derivation.

I.4.2 Seaford Chalk Formation

Seaford Chalk Formation can be described as firm white chalk with conspicuous semi-continuous nodular and tabular flint seams. Hardgrounds and thin marls are known from the lowest beds. Some flint nodules are large to very large.

The Seaford Chalk Formation includes the Stockbridge Rock Member in the Hampshire Downs area, which is shown as a limestone unit.

Chalk is a weak rock and as such it should be noted that the drilling, excavating and sampling process is detrimental to its fabric and structure. Chalk samples that have been machine sampled will therefore appear to be of a lower descriptive grade, as given in CIRIA C574, than the in-situ chalk. Soil sampling and visual observations from open excavations i.e. trial pits would allow chalk description and classification in accordance with CIRIA 574 including commenting for any aperture and discontinuities in the chalk structure.

Erosional features, such as pipes, swallow holes and solution cavities, usually in-filled with drift deposits, are occasionally found in the chalk, sometimes manifesting themselves at the surface as shallow circular depressions. Solution features may be reactivated by the concentrated ingress of water from leaking drains or soakaways. Reactivation may lead to surface collapse.

CIRIA C574 states that the presence of dissolution features should always be assumed when designing foundations for all sites underlain by calcium carbonate rich chalk.

1.5 Groundwater Observations

Groundwater was not observed within the exploratory holes.

Changes in groundwater level occur due to seasonal effects and variations in drainage. The investigation was conducted in November (2025), when levels were likely increasing from their annual minimum in September to their maximum in around March.

Section 2 Site Works

2.1 Proposed Project Works

The proposed intrusive investigation was designed to provide information on the ground conditions and to aid the design of soakaways for the proposed residential development. The intended investigation, as outlined within the Soils Limited quotation (Q30578_ rev 1.1, dated 29th October 2025), was to comprise the following items:

- Infiltration testing within 2No pre-dug trial pits (previously excavated by the Client) in accordance with BRE DG365:2016

2.1.1 Actual Project Works

The site works were undertaken on 11th November 2025, with subsequent sample logging and reporting. The actual works comprised:

- Infiltration testing within the 2No pre-dug trial pits to depths ranging between 2.26m to 2.30m bgl in accordance with BRE DG365:2016

The exploratory holes were backfilled with arisings by the Client upon completion.

All exploratory hole locations are presented in Figure 3.

2.2 Ground Conditions

The exploratory hole locations were selected and excavated by the Client. Engineering exploratory hole logs on the ground conditions encountered are presented in Appendix B.1.

The maximum depth of exploratory holes has been included in Table 2.1.

Table 2.1 Final Depth of Exploratory Hole

Exploratory Hole	Depth (m bgl)
TPSK1	2.30
TPSK2	2.26

The soil conditions encountered were recorded and soil sampling commensurate with the purposes of the investigation was carried out. The depths given on the exploratory hole logs and quoted in this report were measured from ground level.

The soils encountered from immediately below ground surface have been described in the following manner. Where the soil incorporated an organic content such as either decomposing leaf litter or roots or has been identified as part of the in-situ weathering profile, it has been described as Topsoil both on the logs and within this report. Where man has clearly either placed the soil, or the composition altered, with say greater than an estimated 5% of a non-natural constituent, it has been referred to as Made Ground both on the log and within this report.

For more complete information about the soils encountered within the general area of the site reference must be made to the detailed records given within Appendix B, but for the purposes of discussion, the succession of conditions encountered in the exploratory holes in descending order can be summarised as:

**Made Ground
Head Deposits (HEAD)
Seaford Chalk Formation (SCK)**

The ground conditions encountered in the exploratory holes are summarised in Table 2.2.

Table 2.2 Ground Conditions

Strata	Depth Encountered (m bgl)		Typical Thickness (m)	Typical Description
	Top	Bottom		
MG	0.00	0.20-0.50	0.35	Soft dark brown slightly sandy SILT with occasional rootlets
	0.20-0.50	0.40-0.70	0.20	Soft brown, slightly sandy CLAY with brick fragments
HEAD ¹	0.70	1.60	0.90	Soft brown mottled slightly sandy, slightly gravelly CLAY.
SCK	0.40-1.60	2.26 ² -2.30 ²	Not proven ³	Structureless CHALK recovered as off white weak to moderate dense fine to cobble-sized clasts of CHALK in a silty matrix of CHALK. Rare angular flint gravel. (CIRIA Grade Dm)

Note(s): ¹ Head Deposits were only encountered within TPSK2. ² Final depth of exploratory hole. ³ Base of strata not encountered. The depths given in this table were taken from the ground level adjacent to each exploratory hole at the time of investigation.

Section 3 Infiltration Testing

3.1 Infiltration Testing

Infiltration testing was performed within TPSK1 and TPSK2 to provide guidance on the suitability of the ground for the adoption of infiltration features.

The test involved piping water into trial holes from a tanker to record water level drop over time, indicating soakage potential. BRE DG365:2016 requires soakage pits to be filled three times consecutively, after at least 75% head loss, to obtain an accurate infiltration rate

3.2 Test Results

A summary of the infiltration testing undertaken in TPSK1 and TPSK2 is given in Table 3.1 with details of the test provided in Appendix C.1.

Table 3.1 Infiltration Test Results

Exploratory Hole	Pit Depth (m bgl)	Test Cycle	Water Depth (m bgl)		Duration (mins)	Infiltration Rate (m/sec)
			Start	End		
TPSK1	2.30	1	1.53	2.14	8	3.74E-04
	2.18 ¹	2	2.00	2.19	6	2.60E-04
	2.18	3	1.43	2.18	12	4.70E-04
TPSK2	2.26	1	1.80	2.26	4	7.90E-04
	2.22 ¹	2	2.13	2.22	2	3.60E-04
	2.22	3	2.10	2.22	3	4.10E-04

Notes: Invert level was taken at the water depths at the start of the test for the calculation of the infiltration rates. Soakaway performance would be impacted by slow infiltration. ¹ Pit depths were reduced due to a collapse that occurred during the pumping of water.

3.3 Summary and Conclusion

Infiltration testing was undertaken in TPSK1 and TPSK2 as agreed with the Client and in accordance with BRE DG365:2016, below the Made Ground and within the Seaford Chalk Formation.

Calculated infiltration rates ranged between 2.60×10^{-4} m/s and 4.70×10^{-4} m/s for TPSK1, and between 3.60×10^{-4} m/s and 7.90×10^{-4} m/s for TPSK2.

Full compliance in accordance with BRE 365 was achieved within both exploratory holes.

The results of the Trial Pit soakage infiltration tests must be passed to a drainage engineer for further detailed commentary and design.

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Appendix A Standards and Resources

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Appendix C Infiltration Testing Data

Appendix C.1 Infiltration Data



Figure 1 – Site Location Map

Job Number
22218

Project
Little Bedwyn, Marlborough, Wiltshire, SN8 3JG

Client
R W Armstrong

Date
November 2025



Figure 2 – Aerial Photograph

Job Number
22218

Project
Little Bedwyn, Marlborough, Wiltshire, SN8 3JG

Client
R W Armstrong

Date
November 2025



Figure 3 – Exploratory Hole Plan

Job Number
22218

Project
Little Bedwyn, Marlborough, Wiltshire, SN8 3JG

Client
R W Armstrong

Date
November 2025

Appendix A Standards and Resources

The site works, soil descriptions and testing were undertaken in accordance with the following standards where applicable:

- BS 5930:2015 and BS EN ISO 22476-2 2005+A1:2011
- BS 5930:2015 and BS EN ISO 22476-2&3:2005+A1:2011
- BS 5930:2015 and BS EN ISO 22476-3:2005+A1:2011
- BS EN ISO 14688-1:2018 - Geotechnical investigation and testing - Identification and description
- BS EN ISO 14688-2:2018 - Geotechnical investigation and testing - Principles for a classification
- BRE Digest 365 Soakaway Design
- Google Earth
- British Geological Survey Website & iGeology App

Appendix B Field Work

Appendix B.1 Engineers Logs



Trial Pit

TPSK1
Sheet 1 of 1

Hole Type TP	Easting	Northing	Ground Level (m) 2.30	Scale 1:25
Project Name Little Bedwyn	Project No. 22218		Start Date	End Date

Client R V Armstrong	Consultant AN	Contractor
-------------------------	------------------	------------

Inst/ Backfill	Water Levels	Samples and Tests			Level (m)	Depth (m) (thickness)	Strata			
		Depth (m)	Type/ Ref	Results			Legend	Description		
					2.10	(0.20)		Grass over soft dark brown slightly sandy SILT. Sand is fine to medium. Occasional rootlets.MADE GROUND		
						0.20				
						1.90	(0.20)			Soft brown slightly sandy CLAY .Sand is fine to medium. Rare angular coarse flint gravel .Rare angular brick fragments. MADE GROUND
							0.40			
						1.00	(0.90)			Structureless Chalk recovered as light brown stained off white , extremely weak to moderate dense fine to cobble sized clasts in a silty matrix .Rare angular flint gravel. CIRIA Grade Dm. SEAFORD CHALK FORMATION.
						0.00	1.30			Structureless Chalk recovered as light off white , weak to moderate dense fine to cobble sized clasts in a silty matrix .Rare angular flint. CIRIA Grade Dm. SEAFORD CHALK FORMATION.
							(1.00)			
End of Trial Pit at 2.30m										

Remarks	Method, Plant, Stability, Dimensions 0.00 - 2.30m	Logger AN
---------	--	--------------



Trial Pit

TPSK1
SUPPLEMENTARY INFO

Hole Type TP	Easting	Northing	Ground Level (m) 2.30	Scale 1:25
Project Name Little Bedwyn	Project No. 22218		Start Date	End Date
Client R V Armstrong	Consultant AN	Contractor		

Water Strike - General

Struck (m)	Seal Depth (m)	Casing Depth (m)	Date and Time	Remarks
				No groundwater recorded

Water Strike - Details

Struck (m)	Rose To (m)	Time (mins)	Remarks
			No groundwater recorded

Remarks	Method, Plant, Stability, Dimensions 0.00 - 2.30m	Logger AN
---------	--	--------------

Hole Type TP	Easting	Northing	Ground Level (m) 2.26	Scale 1:25
Project Name Little Bedwyn	Project No. 22218		Start Date	End Date

Client R V Armstrong	Consultant AN	Contractor
-------------------------	------------------	------------

Inst/ Backfill	Water Levels	Samples and Tests			Level (m)	Depth (m) (thickness)	Strata		
		Depth (m)	Type/ Ref	Results			Legend	Description	
					1.76	(0.50)		Grass over soft dark brown slightly sandy SILT. Sand is fine to medium. Occasional rootlets. MADE GROUND	0.5
						0.50 (0.20)		Soft brown slightly sandy CLAY .Sand is fine to medium. Rare angular coarse flint gravel .Rare angular brick fragments. MADE GROUND	
						1.56 0.70		Soft brown mottled white slightly sandy slightly gravelly CLAY. Sand is fine .Gravel is angular to subangular, fine to coarse chalk and flint . HEAD DEPOSITS	
						(0.90)			
						0.66 1.60		Structureless Chalk recovered as light brown stained off white , extremely weak to moderate dense fine to cobble sized clasts in a silty matrix .Rare angular flint gravel. CIRIA Grade Dm. SEAFORD CHALK FORMATION.	
						(0.66)			
					0.00	2.26		End of Trial Pit at 2.26m	2.0
									2.5
									3.0
									3.5
									4.0
									4.5
									5.0

Remarks	Method, Plant, Stability, Dimensions 0.00 - 2.26m	Logger AN
---------	--	--------------



Trial Pit

TPSK2
SUPPLEMENTARY INFO

Hole Type TP	Easting	Northing	Ground Level (m) 2.26	Scale 1:25
Project Name Little Bedwyn	Project No. 22218		Start Date	End Date
Client R V Armstrong	Consultant AN	Contractor		

Water Strike - General

Struck (m)	Seal Depth (m)	Casing Depth (m)	Date and Time	Remarks
				No groundwater recorded

Water Strike - Details

Struck (m)	Rose To (m)	Time (mins)	Remarks
			No groundwater recorded

Remarks	Method, Plant, Stability, Dimensions 0.00 - 2.26m	Logger AN
---------	--	--------------

Appendix C Infiltration Testing Data

Appendix C.1 Infiltration Data

Soakaway Calculations

Trial Pit & Test No.	TPSK1 TEST 1
Site Name	Little Bedwyn, Marlborough, Wiltshire, SN8 3JG
Project No.	22218

Field Test

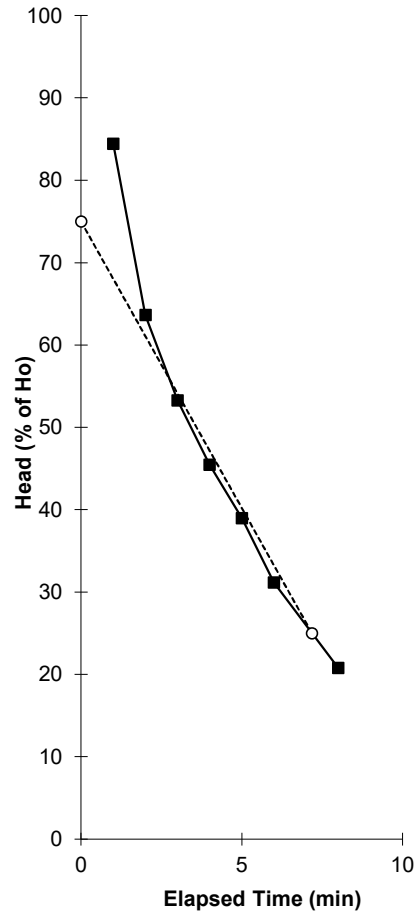
Trial Pit Log (include details of groundwater):

See trial Pit record

Depth of Pit	2.30 m
Width of Pit	0.70 m
Length of Pit	2.30 m
Starting Head of Water	0.77 m
as50	3.92 m2
Vp75-25	0.61985 m3
t75-25	7.2 min
water used	1.2397 m3
f	3.7E-04 m/sec.

Field Data

Depth to Water (m)	Elapsed Time (min)	Head of Water (% of Ho)	Head of Water (m)
1.53	0	100	0.77
1.65	1	84	0.65
1.81	2	64	0.49
1.89	3	53	0.41
1.95	4	45	0.35
2.00	5	39	0.30
2.06	6	31	0.24
2.14	8	21	0.16



T75	0.000	75
T25	7.187	25
T75-25	7.187	Derived from Best Fit

Comments

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Soakaway Calculations

Trial Pit & Test No.	TPSK1 TEST 2
Site Name	Little Bedwyn, Marlborough, Wiltshire, SN8 3JG
Project No.	22218

Field Test

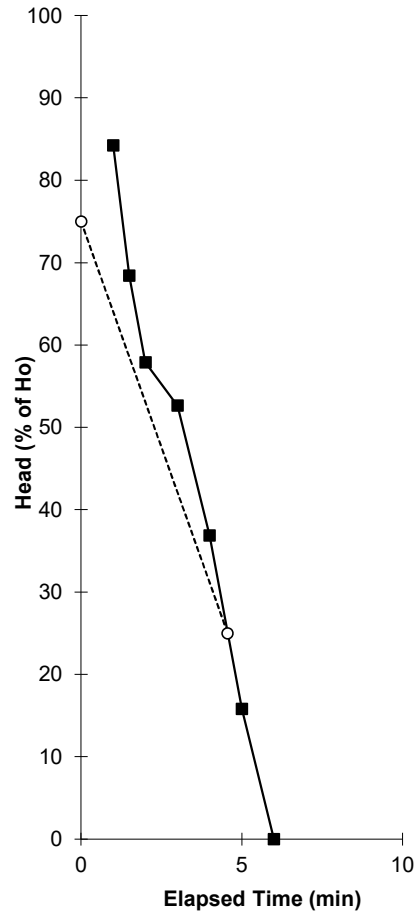
Trial Pit Log (include details of groundwater):

See trial Pit record

Depth of Pit	2.19 m
Width of Pit	0.70 m
Length of Pit	2.30 m
Starting Head of Water	0.19 m
as50	2.18 m ²
Vp75-25	0.15295 m ³
t75-25	4.6 min
water used	0.3059 m ³
f	2.6E-04 m/sec.

Field Data

Depth to Water (m)	Elapsed Time (min)	Head of Water (% of Ho)	Head of Water (m)
2.00	0	100	0.19
2.03	1	84	0.16
2.06	2	68	0.13
2.08	2	58	0.11
2.09	3	53	0.10
2.12	4	37	0.07
2.16	5	16	0.03
2.19	6	0	0.00



T75	0.000	75
T25	4.563	25
T75-25	4.563	Derived from Best Fit

Comments

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Soakaway Calculations

Trial Pit & Test No.	TPSK1 TEST3
Site Name	Little Bedwyn, Marlborough, Wiltshire, SN8 3JG
Project No.	22218

Field Test

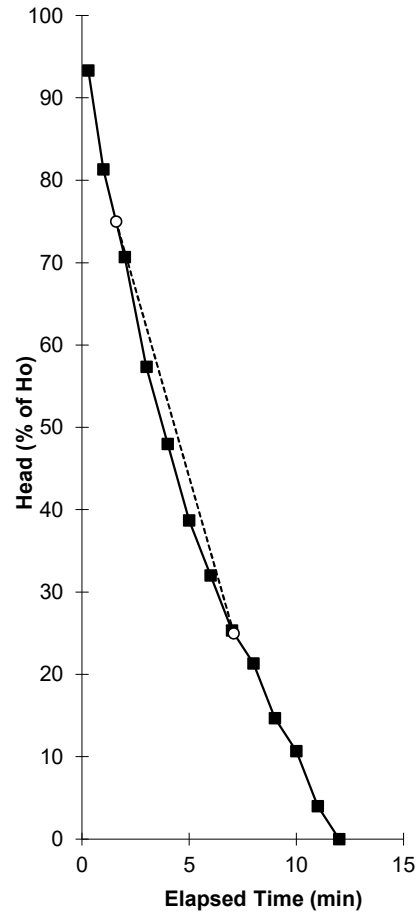
Trial Pit Log (include details of groundwater):

See trial Pit record

Depth of Pit	2.18 m
Width of Pit	0.70 m
Length of Pit	2.30 m
Starting Head of Water	0.75 m
as50	3.86 m2
Vp75-25	0.60375 m3
t75-25	5.5 min
water used	1.2075 m3
f	4.7E-04 m/sec.

Field Data

Depth to Water (m)	Elapsed Time (min)	Head of Water (% of Ho)	Head of Water (m)
1.43	0	100	0.75
1.48	0	93	0.70
1.57	1	81	0.61
1.65	2	71	0.53
1.75	3	57	0.43
1.82	4	48	0.36
1.89	5	39	0.29
1.94	6	32	0.24
1.99	7	25	0.19
2.02	8	21	0.16
2.07	9	15	0.11
2.10	10	11	0.08
2.15	11	4	0.03
2.18	12	0	0.00



T75	1.594	75
T25	7.083	25
T75-25	5.490	Derived from Best Fit

Comments

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Soakaway Calculations

Trial Pit & Test No.	TPSK2 TEST 1
Site Name	Little Bedwyn, Marlborough, Wiltshire, SN8 3JG
Project No.	22218

Field Test

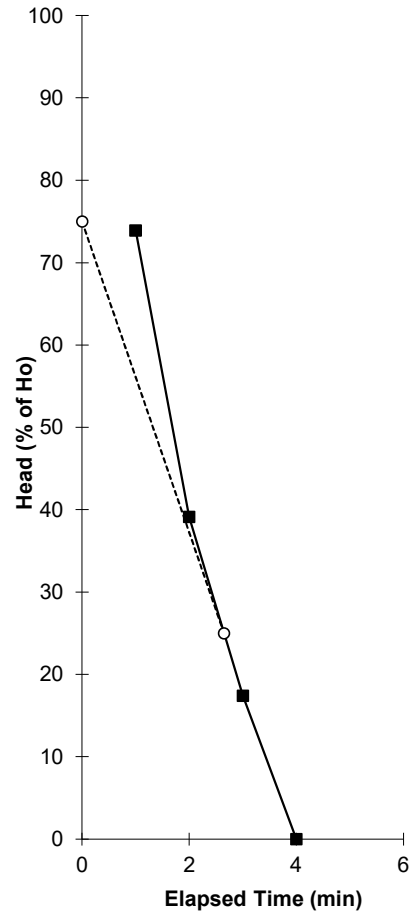
Trial Pit Log (include details of groundwater):

See trial Pit record

Depth of Pit	2.26 m
Width of Pit	0.70 m
Length of Pit	2.70 m
Starting Head of Water	0.46 m
as50	3.454 m ²
Vp75-25	0.4347 m ³
t75-25	2.6 min
water used	0.8694 m ³
f	7.9E-04 m/sec.

Field Data

Depth to Water (m)	Elapsed Time (min)	Head of Water (% of Ho)	Head of Water (m)
1.80	0	100	0.46
1.92	1	74	0.34
2.08	2	39	0.18
2.18	3	17	0.08
2.26	4	0	0.00



T75	0.000	75
T25	2.650	25
T75-25	2.650	Derived from Best Fit

Comments

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Soakaway Calculations

Trial Pit & Test No.	TPSK2 TEST 3
Site Name	Little Bedwyn, Marlborough, Wiltshire, SN8 3JG
Project No.	22218

Field Test

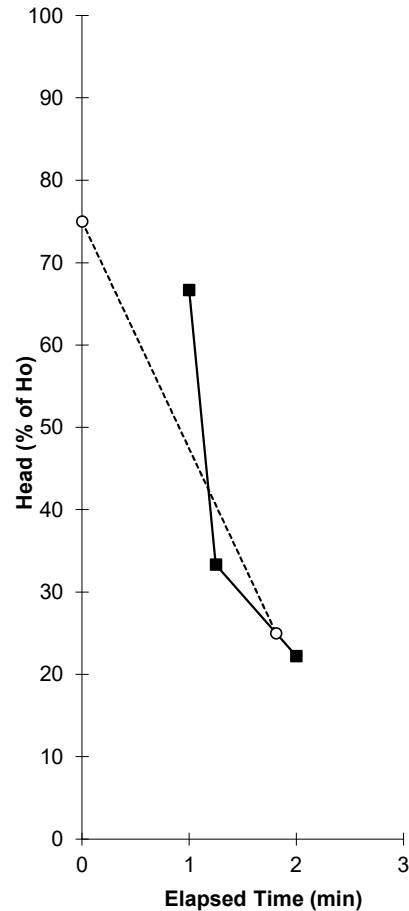
Trial Pit Log (include details of groundwater):

See trial Pit record

Depth of Pit	2.22 m
Width of Pit	0.70 m
Length of Pit	2.70 m
Starting Head of Water	0.09 m
as50	2.196 m ²
Vp75-25	0.08505 m ³
t75-25	1.8 min
water used	0.1701 m ³
f	3.6E-04 m/sec.

Field Data

Depth to Water (m)	Elapsed Time (min)	Head of Water (% of Ho)	Head of Water (m)
2.13	0	100	0.09
2.16	1	67	0.06
2.19	1.25	33	0.03
2.20	2	22	0.02



T75	0.000	75
T25	1.813	25
T75-25	1.813	Derived from Best Fit

Comments

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Soakaway Calculations

Trial Pit & Test No.	TPSK2 TEST 3
Site Name	Little Bedwyn, Marlborough, Wiltshire, SN8 3JG
Project No.	22218

Field Test

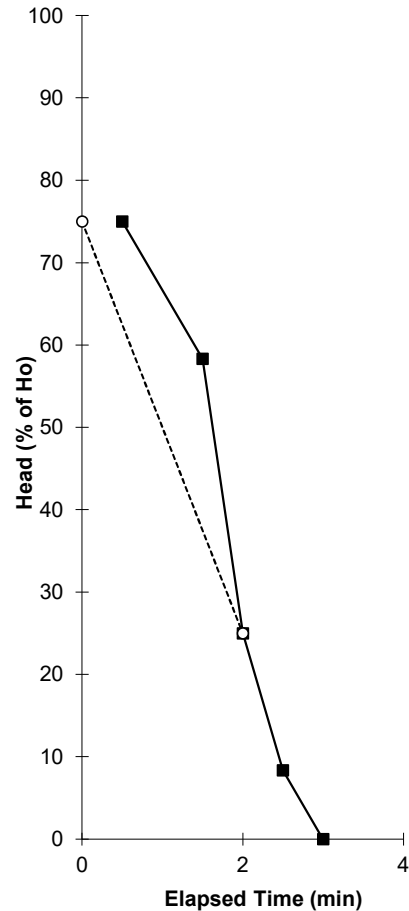
Trial Pit Log (include details of groundwater):

See trial Pit record

Depth of Pit	2.22 m
Width of Pit	0.70 m
Length of Pit	2.70 m
Starting Head of Water	0.12 m
as50	2.298 m ²
Vp75-25	0.1134 m ³
t75-25	2.0 min
water used	0.2268 m ³
f	4.1E-04 m/sec.

Field Data

Depth to Water (m)	Elapsed Time (min)	Head of Water (% of Ho)	Head of Water (m)
2.10	0	100	0.12
2.13	1	75	0.09
2.15	2	58	0.07
2.19	2	25	0.03
2.21	3	8	0.01
2.22	3	0	0.00



T75	0.000	75
T25	2.000	25
T75-25	2.000	Derived from Best Fit

Comments

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Appendix 5

FEH Statistical Method: Catchment Descriptor Equation (InfoDrainage)

Area (m2)	90	Area(Km2)	0.00009
SAAR	799	1000/SAAR	1.251564
FARL	0.97		
BFIHOST19	0.801	BIFIHOST2	0.641601
Region	6		

QMED	x 1.07 =	QBAR
m3/s	l/s	l/s
3.59E-05	0.035862	0.038372

1yr	0.03
2yr	0.03
QBAR	0.04
10yr	0.06
30yr	0.09
100yr	0.12
200yr	0.14

Job: 10474

10474 - Proposed Development: School House Little Bedwyn, Marlborough Cellular Soakaway Calculation		Date: 03/12/2025			
Report Details: Type: Inflows Storm Phase: Phase		Designed by: AW	Checked by:		Approved By:
		Company Address: Didi & Ben Walker			



Catchment Area

Type : Catchment Area

Area (ha)	0.01
-----------	------

Preliminary Sizing

Volumetric Runoff Coefficient	0.900
Percentage Impervious (%)	100
Time of Concentration (mins)	2

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.900
Winter Volumetric Runoff	0.900
Time of Concentration (mins)	2
Percentage Impervious (%)	100

10474 - Proposed Development: School House Little Bedwyn, Marlborough Cellular Soakaway Calculation		Date: 03/12/2025			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: AW	Checked by:		Approved By:
		Company Address: Didi & Ben Walker			



Cellular Storage

Type : Cellular Storage

Dimensions

Exceedance Level (m)	124.300
Depth (m)	0.400
Base Level (m)	123.400
Number of Crates Long	4
Number of Crates Wide	4
Number of Crates High	1
Porosity (%)	95
Crate Length (m)	1
Crate Width (m)	0.5
Crate Height (m)	0.4
Total Volume (m³)	3.540

Advanced

Base Infiltration Rate (m/hr)	0.936
Side Infiltration Rate (m/hr)	0.936
Safety Factor	2.0

10474 - Proposed Development: School House Little Bedwyn, Marlborough Cellular Soakaway Calculation		Date: 03/12/2025			
		Designed by: AW	Checked by:		Approved By:
Report Details: Type: Inflow Summary Storm Phase: Phase		Company Address: Didi & Ben Walker			

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Catchment Area	Cellular Storage		Time of Concentration	0.01	100	10	110	0.011
TOTAL		0.0		0.01				0.011

10474 - Proposed Development: School House Little Bedwyn, Marlborough Cellular Soakaway Calculation		Date: 03/12/2025			
Report Title: Rainfall Analysis Criteria		Designed by: AW	Checked by:		Approved By:
		Company Address: Didi & Ben Walker			

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	10
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall		
1:30	Type: FEH	
Site Location	GB 429150 166050 SU 29150 66050	
Rainfall Version	2022	
Summer	☒	
Winter	☒	

Return Period

Return Period (years)	Increase Rainfall (%)
30.0	0.000

Storm Durations

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

10474 - Proposed Development: School House Little Bedwyn, Marlborough Cellular Soakaway Calculation		Date: 03/12/2025			
		Designed by: AW	Checked by:		Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Company Address: Didi & Ben Walker			



Critical Storm Per Item: Rank By: Max. Resident Volume

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. Resident 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 (%)
Cellular Storage	1:30: 30 years: +0 %: 30 mins: Summer	123.552	123.552	0.152	0.152	3.2	1.162	0.000	2.807	0.0	0.000		67.174

10474 - Proposed Development: School House Little Bedwyn, Marlborough Cellular Soakaway Calculation	Date: 03/12/2025			
	Designed by: AW	Checked by:	Approved By:	
	Report Details: Type: Stormwater Controls Summary Storm Phase: Phase			
Company Address: Didi & Ben Walker				

Status
OK

10474 - Proposed Development: School House Little Bedwyn, Marlborough Cellular Soakaway Calculation	Date: 03/12/2025		
	Designed by: AW	Checked by:	Approved By:
Report Details: Type: Inflows Storm Phase: Phase	Company Address: Didi & Ben Walker		





Catchment Area

Type : Catchment Area

Area (ha)	0.01
-----------	------

Preliminary Sizing

Volumetric Runoff Coefficient	0.900
Percentage Impervious (%)	100
Time of Concentration (mins)	2

Dynamic Sizing

Runoff Method	Time of Concentration
Summer Volumetric Runoff	0.900
Winter Volumetric Runoff	0.900
Time of Concentration (mins)	2
Percentage Impervious (%)	100

10474 - Proposed Development: School House Little Bedwyn, Marlborough Cellular Soakaway Calculation		Date: 03/12/2025			
Report Details: Type: Stormwater Controls Storm Phase: Phase		Designed by: AW	Checked by:		Approved By:
		Company Address: Didi & Ben Walker			



Cellular Storage

Type : Cellular Storage

Dimensions

Exceedance Level (m)	124.300
Depth (m)	0.400
Base Level (m)	123.400
Number of Crates Long	4
Number of Crates Wide	4
Number of Crates High	1
Porosity (%)	95
Crate Length (m)	1
Crate Width (m)	0.5
Crate Height (m)	0.4
Total Volume (m³)	3.540

Advanced

Base Infiltration Rate (m/hr)	0.936
Side Infiltration Rate (m/hr)	0.936
Safety Factor	2.0

10474 - Proposed Development: School House Little Bedwyn, Marlborough Cellular Soakaway Calculation		Date: 03/12/2025			
		Designed by: AW	Checked by:		Approved By:
Report Details: Type: Inflow Summary Storm Phase: Phase		Company Address: Didi & Ben Walker			

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
Catchment Area	Cellular Storage		Time of Concentration	0.01	100	10	110	0.011
TOTAL		0.0		0.01				0.011

10474 - Proposed Development: School House Little Bedwyn, Marlborough Cellular Soakaway Calculation		Date: 03/12/2025			
Report Title: Rainfall Analysis Criteria		Designed by: AW	Checked by:		Approved By:
		Company Address: Didi & Ben Walker			

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Default
Urban Creep	Apply Global Value
Urban Creep Global Value (%)	10
Junction Flood Risk Margin (mm)	300
Perform No Discharge Analysis	☐

Rainfall		
1:100+40%CC		Type: FEH
Site Location	GB 429150 166050 SU 29150 66050	
Rainfall Version	2022	
Summer	☒	
Winter	☒	

Return Period

Return Period (years)	Increase Rainfall (%)
100.0	40.000

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

10474 - Proposed Development: School House Little Bedwyn, Marlborough Cellular Soakaway Calculation		Date: 03/12/2025			
		Designed by: AW	Checked by:		Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		Company Address: Didi & Ben Walker			



Critical Storm Per Item: Rank By: Max. Resident Volume

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. Resident 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 (%)
Cellular Storage	1:100+40% CC: 100 years: +40 %: 60 mins: Summer	123.778	123.778	0.378	0.378	5.2	2.878	0.000	6.556	0.0	0.000	20	18.697

10474 - Proposed Development: School House Little Bedwyn, Marlborough Cellular Soakaway Calculation	Date: 03/12/2025		
	Designed by: AW	Checked by:	Approved By:
	Report Details: Type: Stormwater Controls Summary Storm Phase: Phase		
Company Address: Didi & Ben Walker			

Status
OK