
Meadow View

Drainage Strategy

November 2025

252037/DS/AG/KBL/01

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1 INTRODUCTION

1.1 General

1.1.1 Lanmor Consulting has been appointed to prepare a Drainage Strategy for the proposed development at Land north of Meadow View, Blagrove Lane, Wokingham, Berkshire, RG41 4AU.

1.1.2 The location of the site is shown below in Figure 1.1.

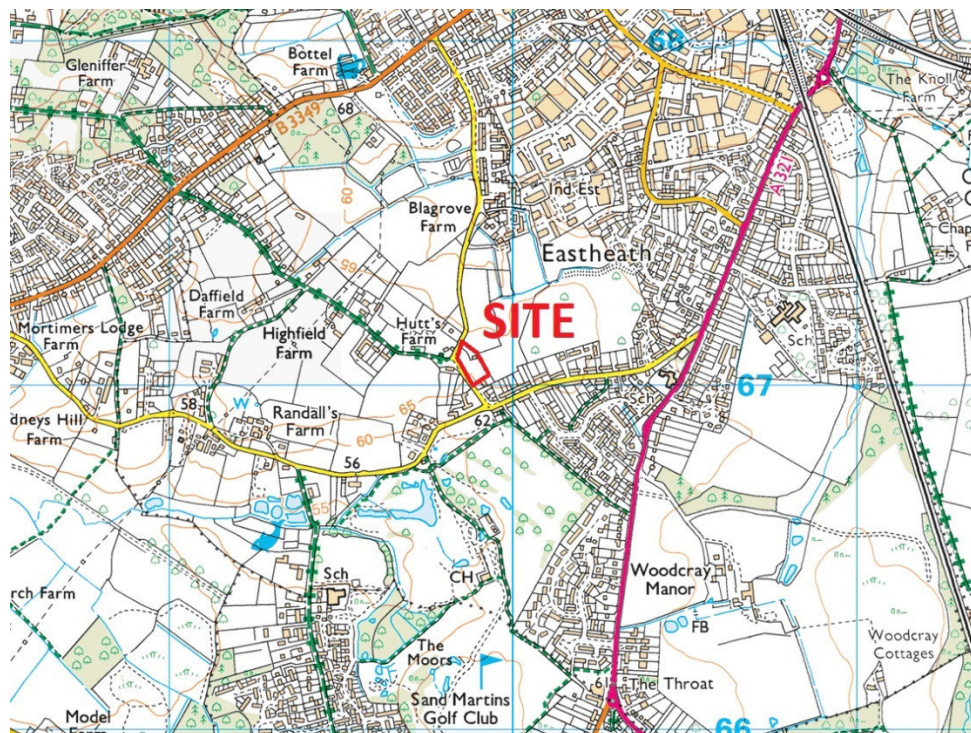


Figure 1.1 – Site Location

1.2 Scope

1.2.1 This report will consider the proposed drainage strategy regime for the above site. It will assess the site's existing conditions, suitable methods of discharging the runoff and will set out the drainage strategy for the development, including proposed discharge rates and any requirements for attenuation.

1.2.2 The information and details within this drainage strategy report will be refined, modified and updated as the detailed design is progressed, post-planning. The scope of this report is outlined below:

- Review available data relating to existing on-site drainage and other drainage networks in the vicinity of the site.
- Review the site's ground conditions for suitability of Sustainable Drainage Systems (SuDS).
- Consider the use of SuDS as an option for the disposal of surface water runoff from the proposed development.
- Undertake drainage assessments of the proposed buildings to establish the discharge rates and attenuation requirements to deal with any increased surface water runoff.

2 SITE CONDITIONS

2.1 Existing Site

2.1.1 The site is a large open field (approximately 0.708 hectares) located to the north of Meadow View, with some dilapidated stables to the northeast. It is therefore currently considered greenfield land, but forms part of the garden / land linked to Meadow View. The site is relatively flat with a fall of around 0.5m from north to south. The site is also flanked by Blagrove Lane along its western and northern boundaries.

2.1.2 A copy of the topographical survey of the site has been included in Appendix A.

2.2 Regional Geology

2.2.1 The British Geological Survey (BGS) indicates that the site is underlain by Bagshot Formation - Sand. Sedimentary bedrock formed between 56 and 47.8 million years ago during the Palaeogene period. There is no information regarding the superficial geology of the site.

2.3 Proposed Development

2.3.1 The planning application seeks to construct 5 dwellings in the currently vacant land. This will consist of 1 x 5-bedroom detached house and 4 x 4-bedroom detached houses. The proposed layout of the development is attached to this report in Appendix A as drawing 2695/07-A.

3 EXISTING DRAINAGE

- 3.1.1 The site is currently vacant and so it is assumed that there is no existing drainage to speak of. The topographical survey has not identified any inspection chambers across the site; however, a ditch has been located along the western boundary into which runoff likely flows at an unrestricted rate.
- 3.1.2 As part of the investigation into the existing drainage Thames Water records were obtained. These show that there is a Thames Water maintained sewer within Blagrove Lane, but that this stops just outside Viewlands at manhole 8901, to the south of Meadow View. Here, the manhole has a cover level of 63.68m AOD and an invert level of 62.79m AOD. The sewer along Blagrove Lane has a diameter of 150mm and flows south, then east down Evendons Lane. A copy of the Thames Water sewer records has been included in Appendix B.

4 PROPOSED DRAINAGE

Foul Water

- 4.1.1 There is no foul provision for the existing site, and the sewer does not extend up to the site, so it is proposed to create a connection to manhole 8901 from the south of the site. The proposed foul system will transport effluent from all of the properties and into the publicly maintained Thames Water network. The new connection will be subject to an S106 application to Thames Water, since it is proposed to connect new dwellings into the mains system. The foul drainage system for the site is indicated on drawing 252037/500/01.

Surface Water

- 4.1.2 With regards to discharge of surface water runoff from the development, the SuDS hierarchy has been considered when designing the drainage strategy for the site. Since the property will have pitched roofs and there are no plans to introduce flat roofs, blue/green roof attenuation was not considered to be a viable option for this development and has therefore been discounted.
- 4.1.3 Rainwater harvesting was also considered as a means of reusing surface water runoff within the building. However, these systems require a separate network of pipes within the property, as well as tanks and pumps to store the rainwater and distribute it throughout. It was considered impractical to implement rainwater harvesting systems on the site due to site constraints and the excessive cost for the development.
- 4.1.4 In addition, for these systems to be successfully implemented there must be sufficient demand for water reuse otherwise this may lead to water quality issues. Furthermore, rainwater harvesting tanks should not be included in the assessment of attenuation required to store runoff from a development as there is no guarantee that the tank will be sufficiently empty to receive another storm.

4.1.5 Should the rainwater harvesting tank be full at the start of the storm, it will not be able to receive any more runoff, therefore additional storage of a similar size would be required to cater for all storm events and the rainwater harvesting tank will provide no benefit in terms of attenuation. For those reasons, this method has been discounted.

4.1.6 Next on the Sustainable Drainage Hierarchy is the use of ground infiltration techniques such as soakaways and infiltration basins. The BGS states that the site is underlain by Bagshot Formation – Sand, which is considered a good medium for infiltration systems such as soakaways. An indicative infiltration rate has therefore been adopted for the proposed drainage strategy, assuming a worst-case scenario of 1×10^{-5} m/s (0.036 m/hr). This has been used to size each of the soakaways, as there will be 1 for each of the 5 plots.

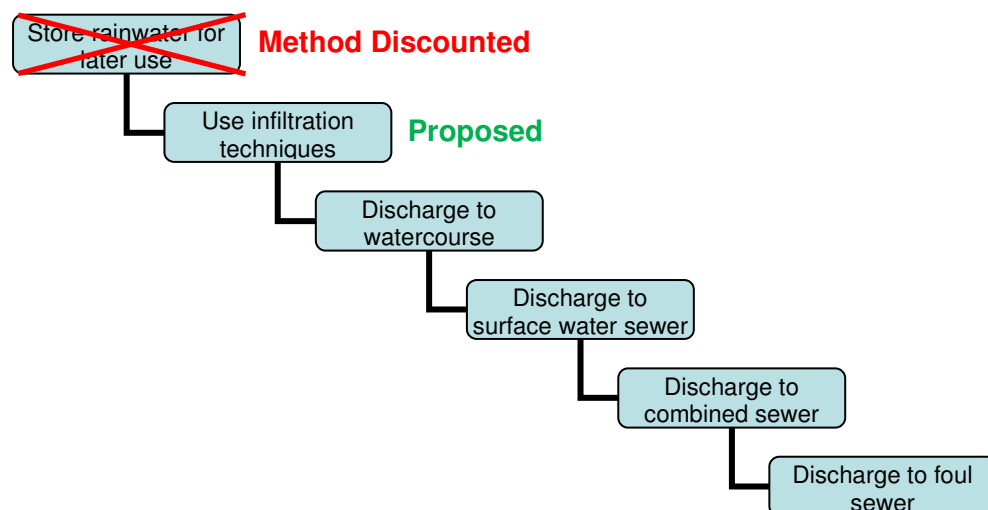


Figure 4.1 – SuDS Hierarchy

4.1.7 The dimensions of the soakaways will each be 2.0m x 7.0m x 0.8m deep. The soakaways have been spaced so that they are 5m from any foundation or structure, at least 5m from each other and 2.5m from the plot boundary. Permeable paving has also been proposed for the access driveways, and this will consist of an OGCR subbase with 30% voids to allow runoff to naturally percolate into the subsoil. The subbase of the paving will be 0.45m deep with 0.2m of cover. The proposed surface water drainage strategy is shown on drawing 252037/500/01 in Appendix C.

4.1.8 The soakaways and the permeable paving have been sized to accommodate a 1 in 100 years plus 40% storm. Each of the soakaways have been designed assuming the volume of runoff from the largest property within the proposed scheme. Calculations undertaken through MicroDrainage software have shown that the proposed soakaway systems and permeable areas would half drain in less than 24hrs and so the proposed drainage system would be compliant with Building Regulations Part H. The full calculations have been included in Appendix D.

5 SURFACE WATER TREATMENT

- 5.1.1 As part of the CIRIA SuDS Manual C753, Section 26 provides guidance regarding methods for managing pollution risks from surface water runoff.
- 5.1.2 Part of the assessment is to determine which land use classification the proposed development falls under. Table 26.1 of the CIRIA Report C753 sets the approaches to water quality risk management. For this site the Simple Index Approach will be used.
- 5.1.3 Table 26.2 in C753 reproduced as Table 7.1, show the potential hazard associated with different land uses the hazard indices. The development will consist of residential houses. It is concluded that the site should be classed within the sections shown in Table 7.1 below.

TABLE 26.2 Pollution hazard indices for different land use classifications				
Land use	Pollution hazard level	Total suspended solids (TSS)	Metals	Hydro-carbons
Residential roofs	Very low	0.2	0.2	0.05
Other roofs (typically commercial/ industrial roofs)	Low	0.3	0.2 (up to 0.8 where there is potential for metals to leach from the roof)	0.05
Individual property driveways, residential car parks, low traffic roads (eg cul de sacs, homezones and general access roads) and non-residential car parking with infrequent change (eg schools, offices) ie < 300 traffic movements/day	Low	0.5	0.4	0.4
Commercial yard and delivery areas, non-residential car parking with frequent change (eg hospitals, retail), all roads except low traffic roads and trunk roads/motorways ¹	Medium	0.7	0.6	0.7
Sites with heavy pollution (eg haulage yards, lorry parks, highly frequented lorry approaches to industrial estates, waste sites), sites where chemicals and fuels (other than domestic fuel oil) are to be delivered, handled, stored, used or manufactured; industrial sites; trunk roads and motorways ¹	High	0.8 ²	0.8 ²	0.9 ²

Table 5.1 – CIRIA SuDS Manual C753 (Land use classifications)

5.1.4 The roofs of the residential buildings are considered to have a “very low” pollution hazard, generating 0.2 total suspended solids, 0.2 metals and 0.05 hydro-carbons. The access and parking areas are considered to have a “low” pollution hazard, generating 0.5 total suspended solids, 0.4 metals and 0.4 hydro-carbons.

5.1.5 The proposed development will incorporate soakaways and permeable paving for infiltration. Table 26.4 of C753 reproduced below as Table 7.2 sets out the mitigation indices provided by SuDS features for discharge to surface waters.

TABLE 26.4 Indicative SuDS mitigation indices for discharges to groundwater			
Characteristics of the material overlying the proposed infiltration surface, through which the runoff percolates¹	TSS	Metals	Hydrocarbons
A layer of dense vegetation underlain by a soil with good contaminant attenuation potential ² of at least 300 mm in depth ³	0.6 ⁴	0.5	0.6
A soil with good contaminant attenuation potential ² of at least 300 mm in depth ³	0.4 ⁴	0.3	0.3
Infiltration trench (where a suitable depth of filtration material is included that provides treatment, ie graded gravel with sufficient smaller particles but not single size coarse aggregate such as 20 mm gravel) underlain by a soil with good contaminant attenuation potential ² of at least 300 mm in depth ³	0.4 ⁴	0.4	0.4
Constructed permeable pavement (where a suitable filtration layer is included that provides treatment, and including a geotextile at the base separating the foundation from the subgrade) underlain by a soil with good contaminant attenuation potential ² of at least 300 mm in depth ³	0.7	0.6	0.7
Bioretention underlain by a soil with good contaminant attenuation potential ² of at least 300 mm in depth ³	0.8 ⁴	0.8	0.8
Proprietary treatment systems ^{5, 6}	These must demonstrate that they can address each of the contaminant types to acceptable levels for inflow concentrations relevant to the contributing drainage area.		

Table 5.2 – CIRIA SuDS Manual C753 (Mitigation Indices to groundwater)

5.1.6 The permeable paving will provide mitigation of 0.7 for total suspended solids, 0.6 for metals and 0.7 for hydrocarbons and the soakaways 0.4 mitigation for all hazards. These are all greater than the pollution hazard indices identified in table 5.2 above.

6 SUDS / SURFACE WATER MAINTENANCE

- 6.1.1 Regularly inspecting the surface water drainage network for blockages and clearing unwanted debris / silt from the system should improve the performance of the surface water network and decrease the need for future repairs. In the event that road gullies become blocked, high pressure water jets can be used to clear the gully and ensure they are functioning correctly, this should be undertaken by certified trained professionals.
- 6.1.2 The level and frequency of maintenance required on site is dependent on the type of facility. The type of maintenance will fall into one of three categories “regular maintenance”, “occasional maintenance” and “remedial maintenance”.
- 6.1.3 Regular maintenance of the drainage and SuDS features will include, inspections, removal of litter / debris and sweeping of the surfaces. Occasional maintenance will include removal of sediment etc. and remedial maintenance may include structural repairs and infiltration reconditioning if required.
- 6.1.4 The drainage and SuDS elements after an initial inspection following construction should be inspected on a monthly basis for the first 12 months and after large storms, thereafter the following maintenance regime should be applied and adjusted if the 12-month monitoring process has identified any issues.
- 6.1.5 Following completion of the development the owners of the properties will be responsible for maintaining the drainage network, including the SuDS elements.
- 6.1.6 The appropriate health and safety equipment must be used when accessing manholes. Confined space certificates must be held by any personnel entering a manhole and the appropriate permits should be obtained.
- 6.1.7 Pipes are intended to be the main conveyance across the development. They are intended to be dry except for during rainfall events. These have been designed to be self-cleaning where possible for smaller diameter pipes, and for larger diameters the risk is reduced due to the overall pipe size.

6.1.8 For soakaways, the following maintenance is required.

Soakaway Maintenance Schedule		
	Required Action	Typical Frequency
Regular maintenance	Inspect for sediment debris in pre-treatment components and floor of inspection tube / chamber and inside soakaway	Annually
	Cleaning of gutters and any filters on downpipes	Annually (or as required based on inspections)
	Trimming any roots that may be causing blockages	Annually (or as required)
Occasional maintenance	Remove sediment and debris from pre-treatment components and floor of inspection tube / chamber and inside soakaway	As required, based on inspections
Remedial Actions	Reconstruct soakaway and/or replace or clean void fill, if performance deteriorates or failure occurs	As required
	Replacement of clogged geotextile (will require reconstruction of soakaway)	As required
Monitoring	Inspect silt traps and note rate of sediment accumulation	Monthly in the first year and then annually
	Check soakaway to ensure emptying is occurring	Annually

Table 6.1 – Soakaway Maintenance Schedule

6.1.9 For permeable paving, the following maintenance is required.

Permeable Paving Maintenance Schedule		
	Required Action	Typical Frequency
Regular maintenance	Remove debris and leaves etc.	Once a year, after autumn leaf fall, or reduced frequency as required, based on site-specific observations of clogging or manufacturer's recommendations – pay particular attention to areas where water runs onto pervious surfaces from adjacent impermeable areas as this area is most likely to collect the most sediment.
	Stabilise and mow contributing and adjacent areas	As required
Occasional maintenance	Removal of weeds	As required- once per year on less frequently used pavements
	Remediate any landscaping which, through vegetation maintenance or soil slip, has been raised to within 50 mm of the level of the paving	As required
Remedial Actions	Remedial work to any depressions, rutting etc	As required
	Rehabilitation of surface and upper substructure	Every 10 to 15 years or as required (if infiltration performance is reduced due to significant clogging)
Monitoring	Inspect for evidence of poor operation and/or weed growth - if required, take remedial action.	Three-monthly, 48 hours after large storms in the first six months
	Inspect silt accumulation rates and establish appropriate frequencies for rehabilitation	Annually
	Monitor inspection chambers	Annually

Table 6.2 – Permeable Paving Maintenance Schedule

6.1.10 For manholes and pipes, the following maintenance will be required.

Manhole / Pipe Maintenance Schedule		
	Required Action	Typical Frequency
Regular maintenance	Inspect for evidence of poor operation via water level in chambers. If required, take remedial action.	3-monthly, 48 hours after large storms.
	Check and remove large vegetation growth near pipe runs.	Monthly or as required
	Remove sediment from structures.	Annually or as required
Remedial Actions	Rod through poorly performing runs as initial remediation.	As required
	If continued poor performance jet and CCTV survey poorly performing runs.	As required
Monitoring	Inspect/check all inlets, outlets, to ensure that they are in good condition and operating as designed.	Annually
	Survey inside of pipe manholes for sediment build-up and remove if necessary	Every 5 years or as required

Table 6.3 – Manhole and Pipe Maintenance Schedule

6.1.11 For specialist pieces of equipment, maintenance brochures will be provided by the manufacturers. These will set out the frequency of inspections and correct methods of cleaning etc. that should be followed. It is recommended that once installed the facility should be inspected monthly for the first three months and thereafter at six monthly intervals or as advised in the maintenance brochure.

6.1.12 The above information is only intended as guidance in standard maintenance practise for surface water drainage and SuDS features. The above measures should be reviewed regularly and modified to suit the site conditions.

7 SUMMARY AND CONCLUSION

- 7.1.1 The proposed development is for the construction of 5 dwellings in the vacant land to the north of Meadow View.
- 7.1.2 The existing site is an open field located to the north of Meadow View and bounded by Blagrove Lane along its western and eastern boundaries. This means that the existing site is unlikely to have any drainage features that the strategy could reuse in any way, however mapping obtained from Thames Water showed that there is a sewer located slightly to the south of the site, in Blagrove Lane. On this basis, it is proposed to construct a connection into the Thames Water sewer to manage foul water from the proposed development. As new dwellings are proposed, an S106 application would be required.
- 7.1.3 The geology of the site is also Bagshot Formation sand and so infiltration is likely to be a viable means of discharging surface water runoff. Soakaways are proposed for each of the dwellings, and these have been sized to provide storage for all high intensity storms up to and including the 1 in 100 years plus 40%. Permeable paving will be used for the driveways, and this will consist of an OGCR subbase that will allow rainwater to naturally percolate into the ground. Both the soakaways and the paving will half drain in under 24 hours in accordance with Building Regulations.
- 7.1.4 For the reasons outlined in this report we see no reason to refuse planning permission on the grounds of there being insufficient capacity to manage effluent or discharge runoff from the development.

APPENDIX A

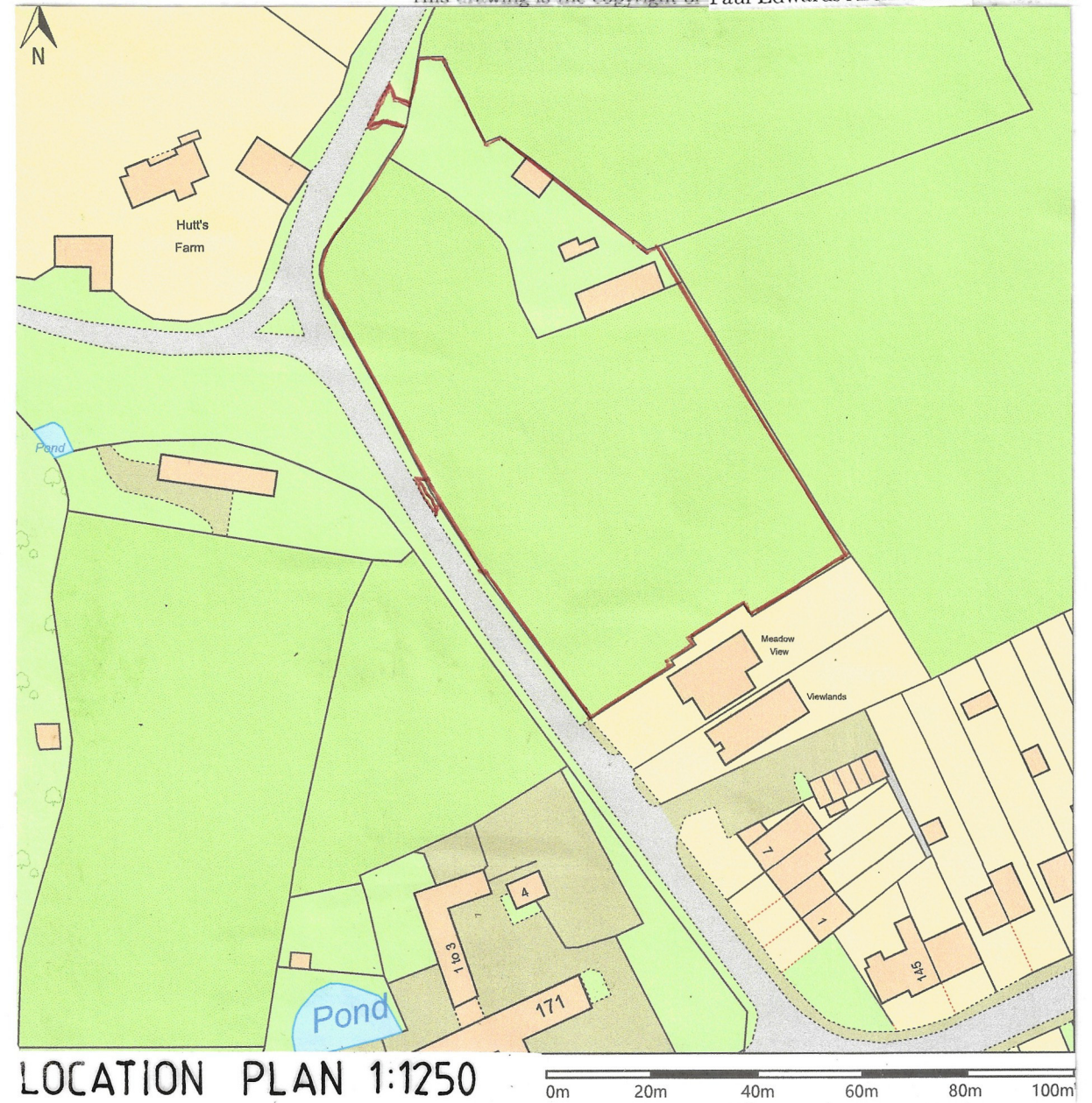
Topographical Survey

Proposed Site Plan

Notes

All dimensions and levels on site are to be checked prior to commencement of work.

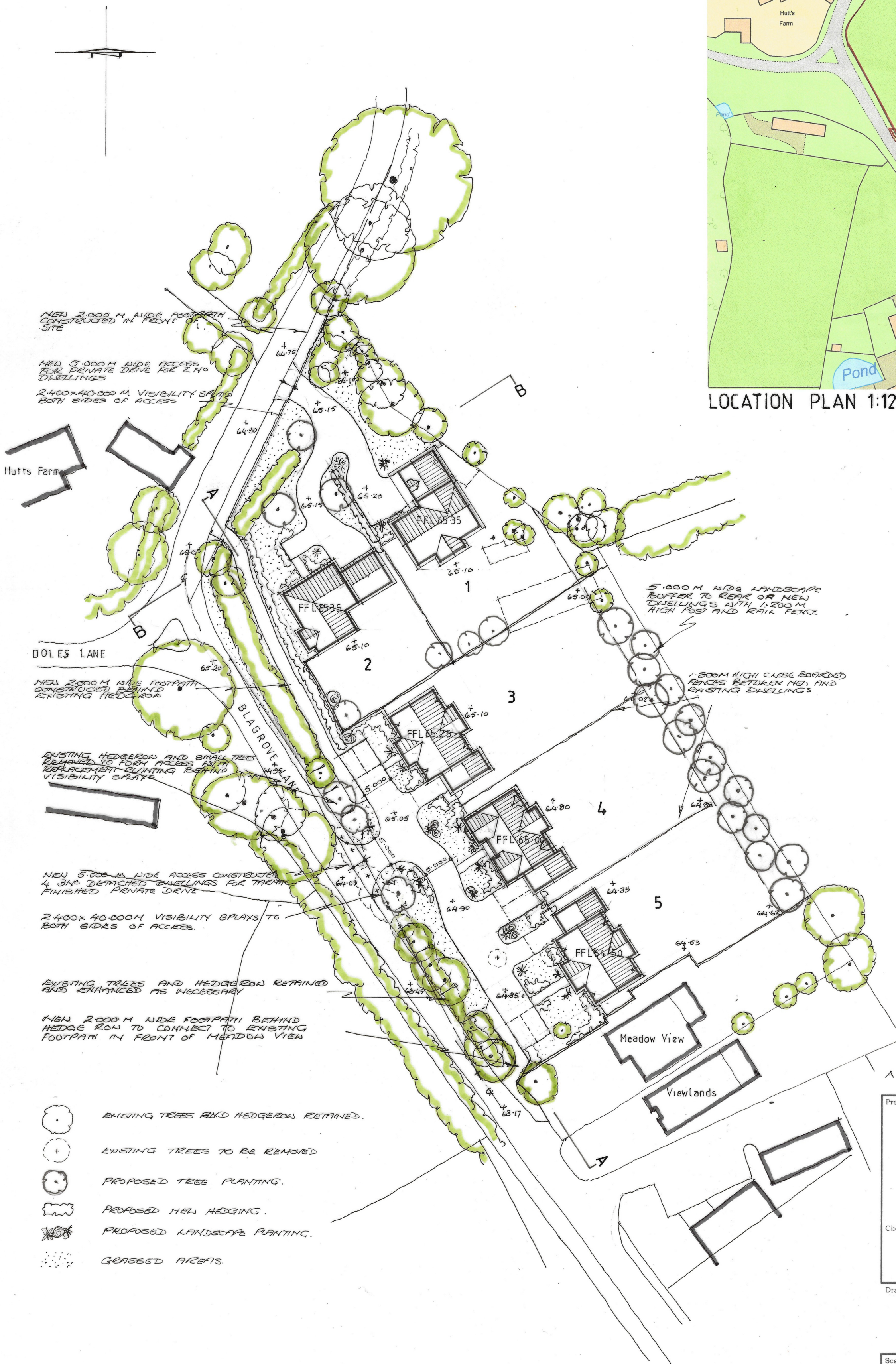
This drawing is the copyright of Paul Edwards Architecture



LOCATION PLAN 1:1250

SITE AREA = 0.708 ha = 1.750 acres

1 No 5 bedroom detached house
4 No 4 bedroom detached houses



SITE PLAN 1:500

SITE PLANS

Scale As shown at A2 Date July 2025



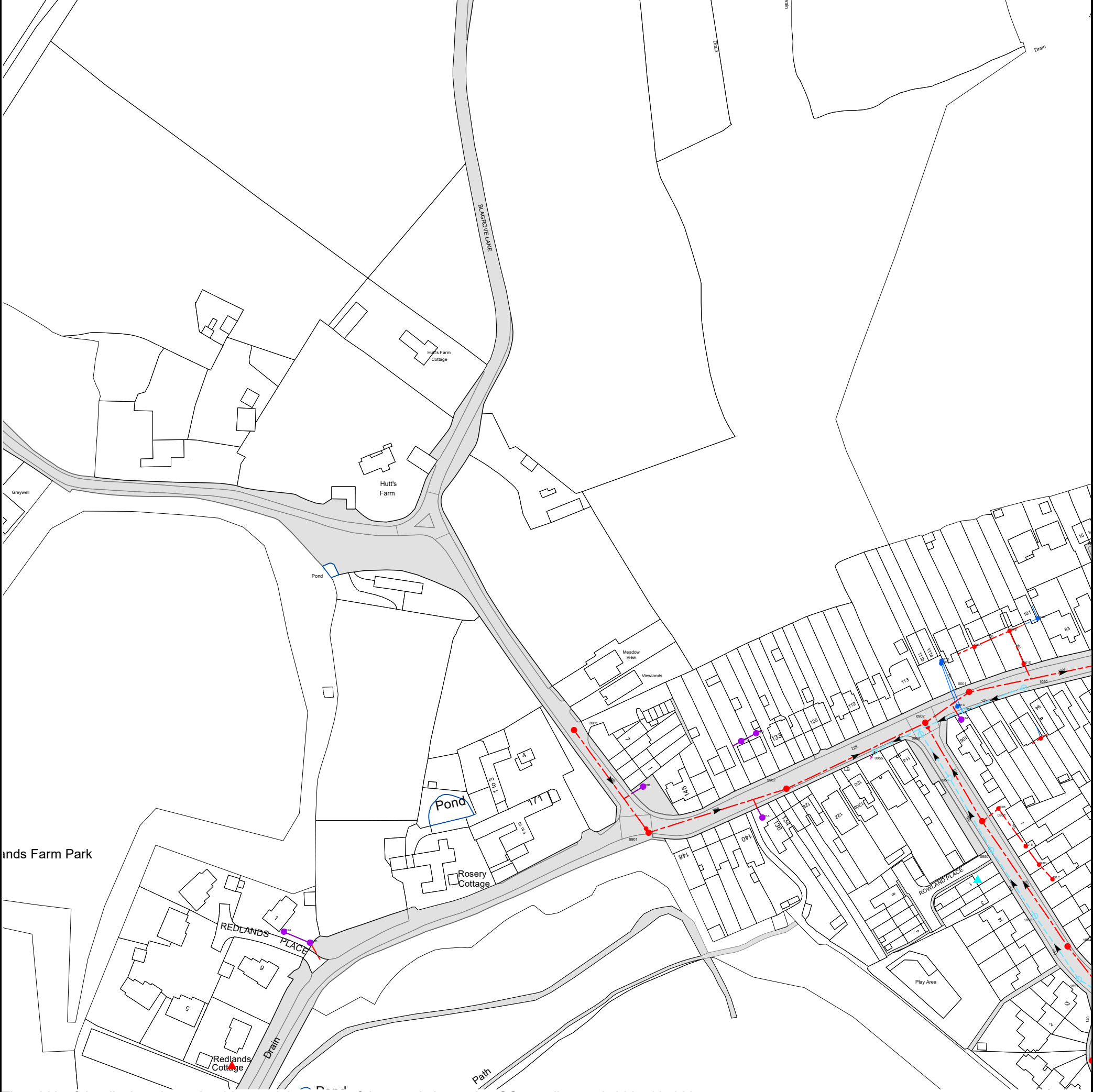
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Job 2695 Dwg. 07 A

APPENDIX B

Thames Water Sewer Records



The width of the displayed area is 500 m and the centre of the map is located at OS coordinates 479887,167069
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
781A	n/a	n/a
781B	n/a	n/a
9901	62.29	58.29
991A	n/a	n/a
001E	n/a	n/a
001D	n/a	n/a
091C	n/a	n/a
091A	n/a	n/a
0954	64	62.85
001A	n/a	n/a
0901	63.6	60.9
0950	63.7	63.01
091B	n/a	n/a
001B	n/a	n/a
101D	n/a	n/a
191E	n/a	n/a
1852	63.94	63.17
101C	n/a	n/a
191D	n/a	n/a
191C	n/a	n/a
1804	64.05	61.27
1851	64.14	63.4
1802	64.14	61.84
8901	63.68	62.79
991B	n/a	n/a
991C	n/a	n/a
991D	n/a	n/a
9902	63.02	58.05
0955	63.42	62.26
0952	63.62	62.7
0902	63.72	57.73
0951	63.53	n/a
0001	63.98	57.75
1050	64.12	63.18
191B	n/a	n/a

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

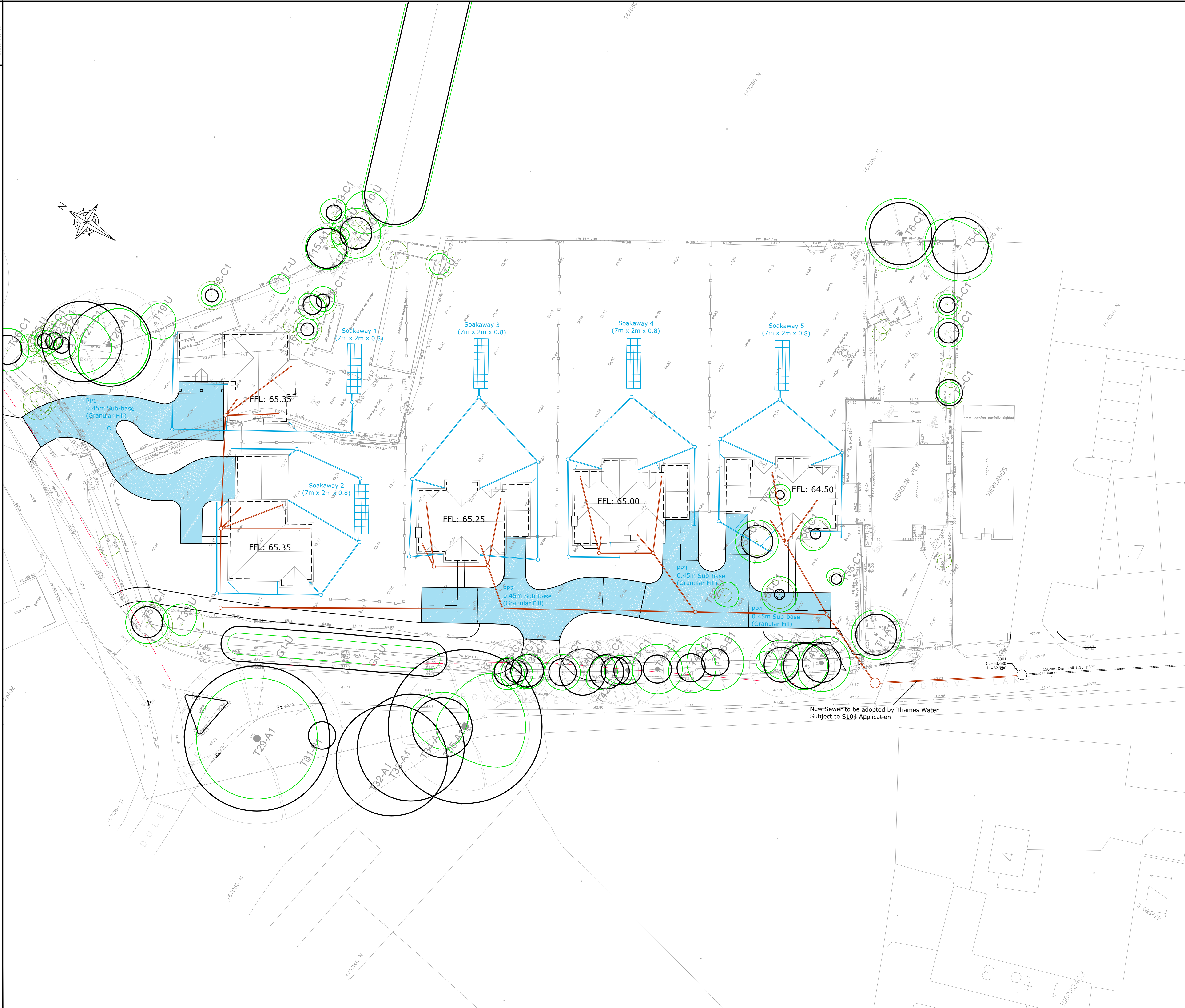
	Casement	Ducts may contain high voltage cables. Please check with Thames Water.
	Conduit Bridge	
	Subway	
	Tunnel	

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.

APPENDIX C

Proposed Drainage Strategy



NOTES

- All dimensions are in meters unless expressed otherwise and all levels are shown in meters above Ordnance Datum.
- This drawing shall be read in conjunction with the drainage schedules and standard details.
- All existing sewer routes are to be proved on site by the contractor and any discrepancies notified to engineer.
- All sewers shall be constructed in accordance with Part H of the Building Regulations and Sewers for Adoption 7th Edition.
- It is the contractors responsibility to ensure compliance with current building regulations and codes of practice.
- Reference should be made to the structural engineers details for all aspects of foundation design and construction.
- The contractor should check all dimensions on site. Any discrepancies shall be reported to the engineer immediately.
- Connections to the adopted drainage authority sewers shall be made under the supervision of the authority. The contractor shall be responsible for obtaining the necessary consents required from the drainage authority.
- Bed type B,F and N shall be used for rigid pipes. Bed type Z shall be used for all gully connections and pipes under proposed carriageways with less than 700mm cover. The concrete bed and surround is to extend to the side of the trench or be of minimum width and voids filled with well compacted selected backfill.
- All precast concrete manhole units are to conform to B.S. 5911. Precast concrete cover slabs are to be heavy duty.
- Downstream exit pipes of 600mm dia. and over should be fitted with heavy duty safety chains across their mouths.
- Where large differential settlement is probable, several short lengths of pipe with flexible joints should be laid on either side of the chamber.
- Where drains pass through foundations, a flexible joint should be provided within 150mm of the face of the structure.
- Fast setting resin mortars may be used in lieu of cement mortar for bedding manhole frames where agreed with the Engineer to enable early cover loading.
- The concrete base slab shall be 225mm minimum thickness for chambers up to 4500mm deep. Manholes over 4500mm deep require a slab 450mm thick.
- All manholes over 2000mm deep are to be fitted with a "DANGER TEST FOR OXYGEN" sign
- Appropriate measures (to be agreed with the district council's building control section) are to be taken to discourage rodent entry into the properties.
- The contractor is to keep a record of any variations made on site, including the relocation of sewers or drains, so that an as built drawing can be prepared upon completion of the project.
- Location of RWP's and SVP's to be confirmed by the architect, Sub Stacks shall not be used unless connected to a ventilated section of the sewer in accordance with Building Regulations.

P1	PRELIMINARY ISSUE	IN	RS	KBL	14/11/25
Rev	Amendment	Drawn	Checked	Approved	Date

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Mr and Mrs R Ward

Land Adjacent To Meadow View,
Wokingham, Berkshire, RG41 4AU

Drainage Strategy

Sheet 1 of 1

DRAWN	IN	CHECKED	RS	APPROVED	KBL
DATE	Nov-2025	DATE	Nov-2025	DATE	Nov-2025
SCALE	1:250	PRJ No.	252037	SIZE	REV
DWG No.	252037-500-01			A1	P1

APPENDIX D

MicroDrainage Calculations

Lanmor Consulting Ltd				Page 1																																																																																																																																																																																																																			
Thorogood House 34 Tolworth Close Surbition Surrey KT6 7EW			Land Adjacent To Meadow View, Blagrove Lane, Wokingham, Berkshire, RG41 4AU																																																																																																																																																																																																																				
Date Nov-2025 File Soakaway.srcx			Designed by IN Checked by RS																																																																																																																																																																																																																				
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Summary of Results for 100 year Return Period (+40%) Half Drain Time : 1047 minutes. <table><thead><tr><th>Storm Event</th><th>Max Level (m)</th><th>Max Depth (m)</th><th>Max Infiltration (l/s)</th><th>Max Volume (m³)</th><th>Status</th></tr></thead><tbody><tr><td>15 min Summer</td><td>64.152</td><td>0.282</td><td>0.1</td><td>3.8</td><td>O K</td></tr><tr><td>30 min Summer</td><td>64.239</td><td>0.369</td><td>0.1</td><td>4.9</td><td>O K</td></tr><tr><td>60 min Summer</td><td>64.327</td><td>0.457</td><td>0.1</td><td>6.1</td><td>O K</td></tr><tr><td>120 min Summer</td><td>64.411</td><td>0.541</td><td>0.1</td><td>7.2</td><td>O K</td></tr><tr><td>180 min Summer</td><td>64.455</td><td>0.585</td><td>0.1</td><td>7.8</td><td>O K</td></tr><tr><td>240 min Summer</td><td>64.482</td><td>0.612</td><td>0.1</td><td>8.1</td><td>O K</td></tr><tr><td>360 min Summer</td><td>64.508</td><td>0.638</td><td>0.1</td><td>8.5</td><td>O K</td></tr><tr><td>480 min Summer</td><td>64.520</td><td>0.650</td><td>0.1</td><td>8.6</td><td>O K</td></tr><tr><td>600 min Summer</td><td>64.523</td><td>0.653</td><td>0.1</td><td>8.7</td><td>O K</td></tr><tr><td>720 min Summer</td><td>64.520</td><td>0.650</td><td>0.1</td><td>8.7</td><td>O K</td></tr><tr><td>960 min Summer</td><td>64.511</td><td>0.641</td><td>0.1</td><td>8.5</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>64.490</td><td>0.620</td><td>0.1</td><td>8.2</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>64.454</td><td>0.584</td><td>0.1</td><td>7.8</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>64.418</td><td>0.548</td><td>0.1</td><td>7.3</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>64.355</td><td>0.485</td><td>0.1</td><td>6.5</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>64.299</td><td>0.429</td><td>0.1</td><td>5.7</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>64.249</td><td>0.379</td><td>0.1</td><td>5.0</td><td>O K</td></tr><tr><td>8640 min 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min Summer</td><td>9.115</td><td>0.0</td><td>600</td></tr><tr><td>720 min Summer</td><td>7.889</td><td>0.0</td><td>714</td></tr><tr><td>960 min Summer</td><td>6.276</td><td>0.0</td><td>818</td></tr><tr><td>1440 min Summer</td><td>4.539</td><td>0.0</td><td>1066</td></tr><tr><td>2160 min Summer</td><td>3.278</td><td>0.0</td><td>1472</td></tr><tr><td>2880 min Summer</td><td>2.600</td><td>0.0</td><td>1876</td></tr><tr><td>4320 min Summer</td><td>1.872</td><td>0.0</td><td>2720</td></tr><tr><td>5760 min Summer</td><td>1.482</td><td>0.0</td><td>3512</td></tr><tr><td>7200 min Summer</td><td>1.235</td><td>0.0</td><td>4320</td></tr><tr><td>8640 min Summer</td><td>1.064</td><td>0.0</td><td>5024</td></tr><tr><td>10080 min Summer</td><td>0.938</td><td>0.0</td><td>5848</td></tr><tr><td>15 min Winter</td><td>126.830</td><td>0.0</td><td>19</td></tr></tbody></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	64.152	0.282	0.1	3.8	O K	30 min Summer	64.239	0.369	0.1	4.9	O K	60 min Summer	64.327	0.457	0.1	6.1	O K	120 min Summer	64.411	0.541	0.1	7.2	O K	180 min Summer	64.455	0.585	0.1	7.8	O K	240 min Summer	64.482	0.612	0.1	8.1	O K	360 min Summer	64.508	0.638	0.1	8.5	O K	480 min Summer	64.520	0.650	0.1	8.6	O K	600 min Summer	64.523	0.653	0.1	8.7	O K	720 min Summer	64.520	0.650	0.1	8.7	O K	960 min Summer	64.511	0.641	0.1	8.5	O K	1440 min Summer	64.490	0.620	0.1	8.2	O K	2160 min Summer	64.454	0.584	0.1	7.8	O K	2880 min Summer	64.418	0.548	0.1	7.3	O K	4320 min Summer	64.355	0.485	0.1	6.5	O K	5760 min Summer	64.299	0.429	0.1	5.7	O K	7200 min Summer	64.249	0.379	0.1	5.0	O K	8640 min Summer	64.205	0.335	0.1	4.5	O K	10080 min Summer	64.165	0.295	0.1	3.9	O K	15 min Winter	64.187	0.317	0.1	4.2	O K	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	126.830	0.0	19	30 min Summer	83.383	0.0	34	60 min Summer	52.299	0.0	64	120 min Summer	31.753	0.0	124	180 min Summer	23.426	0.0	182	240 min Summer	18.779	0.0	242	360 min Summer	13.642	0.0	362	480 min Summer	10.873	0.0	482	600 min Summer	9.115	0.0	600	720 min Summer	7.889	0.0	714	960 min Summer	6.276	0.0	818	1440 min Summer	4.539	0.0	1066	2160 min Summer	3.278	0.0	1472	2880 min Summer	2.600	0.0	1876	4320 min Summer	1.872	0.0	2720	5760 min Summer	1.482	0.0	3512	7200 min Summer	1.235	0.0	4320	8640 min Summer	1.064	0.0	5024	10080 min Summer	0.938	0.0	5848	15 min Winter	126.830	0.0	19
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Thorogood House 34 Tolworth Close Surbition Surrey KT6 7EW		Land Adjacent To Meadow View, Blagrove Lane, Wokingham, Berkshire, RG41 4AU			
Date Nov-2025 File Soakaway.srcx		Designed by IN Checked by RS			
XP Solutions		Source Control 2015.1			
<u>Summary of Results for 100 year Return Period (+40%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	64.284	0.414	0.1	5.5	O K
60 min Winter	64.383	0.513	0.1	6.8	O K
120 min Winter	64.479	0.609	0.1	8.1	O K
180 min Winter	64.530	0.660	0.1	8.8	O K
240 min Winter	64.562	0.692	0.1	9.2	O K
360 min Winter	64.594	0.724	0.1	9.6	O K
480 min Winter	64.611	0.741	0.1	9.9	O K
600 min Winter	64.618	0.748	0.1	9.9	O K
720 min Winter	64.619	0.749	0.1	10.0	O K
960 min Winter	64.610	0.740	0.1	9.8	O K
1440 min Winter	64.582	0.712	0.1	9.5	O K
2160 min Winter	64.535	0.665	0.1	8.9	O K
2880 min Winter	64.486	0.616	0.1	8.2	O K
4320 min Winter	64.394	0.524	0.1	7.0	O K
5760 min Winter	64.314	0.444	0.1	5.9	O K
7200 min Winter	64.244	0.374	0.1	5.0	O K
8640 min Winter	64.183	0.313	0.1	4.2	O K
10080 min Winter	64.129	0.259	0.1	3.4	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	83.383	0.0	33		
60 min Winter	52.299	0.0	62		
120 min Winter	31.753	0.0	122		
180 min Winter	23.426	0.0	180		
240 min Winter	18.779	0.0	238		
360 min Winter	13.642	0.0	354		
480 min Winter	10.873	0.0	468		
600 min Winter	9.115	0.0	582		
720 min Winter	7.889	0.0	692		
960 min Winter	6.276	0.0	902		
1440 min Winter	4.539	0.0	1124		
2160 min Winter	3.278	0.0	1580		
2880 min Winter	2.600	0.0	2044		
4320 min Winter	1.872	0.0	2900		
5760 min Winter	1.482	0.0	3752		
7200 min Winter	1.235	0.0	4544		
8640 min Winter	1.064	0.0	5360		
10080 min Winter	0.938	0.0	6144		
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Thorogood House 34 Tolworth Close Surbition Surrey KT6 7EW	Land Adjacent To Meadow View, Blagrove Lane, Wokingham, Berkshire, RG41 4AU	
Date Nov-2025 File Soakaway.srcx	Designed by IN Checked by RS	
XP Solutions Source Control 2015.1		

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.500	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.016

Time (mins)		Area
From:	To:	(ha)
0	4	0.016

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Thorogood House 34 Tolworth Close Surbition Surrey KT6 7EW	Land Adjacent To Meadow View, Blagrove Lane, Wokingham, Berkshire, RG41 4AU	
Date Nov-2025 File Soakaway.srcx	Designed by IN Checked by RS	
XP Solutions Source Control 2015.1		

Model Details

Storage is Online Cover Level (m) 65.070

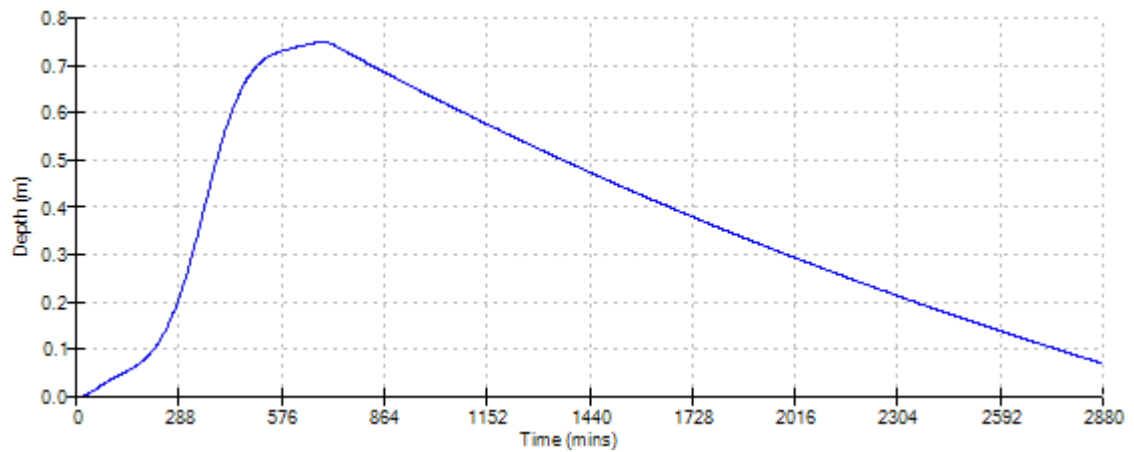
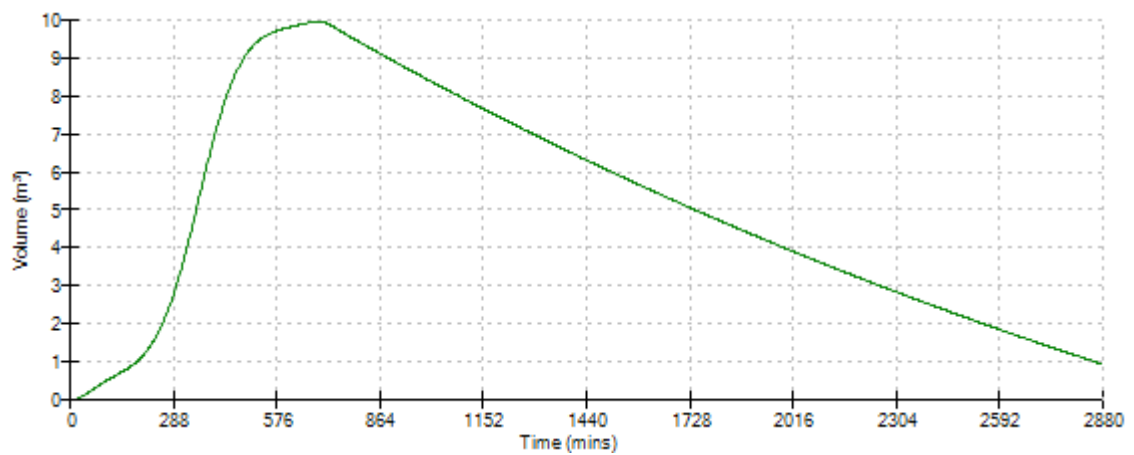
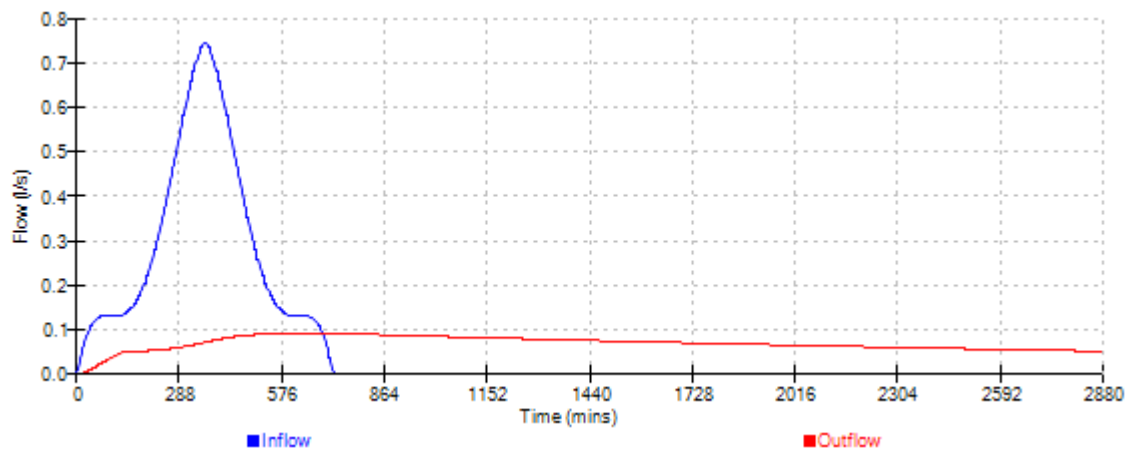
Cellular Storage Structure

Invert Level (m) 63.870 Safety Factor 3.0
Infiltration Coefficient Base (m/hr) 0.03600 Porosity 0.95
Infiltration Coefficient Side (m/hr) 0.03600

Depth (m)	Area (m ²)	Inf. Area (m ²)	Depth (m)	Area (m ²)	Inf. Area (m ²)
0.000	14.0	14.0	0.801	0.0	28.4
0.800	14.0	28.4			

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Event: 720 min Winter



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<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 185 minutes. <table><tr><th>Storm Event</th><th>Max Level (m)</th><th>Max Depth (m)</th><th>Max Infiltration (l/s)</th><th>Max Volume (m³)</th><th>Status</th></tr><tr><td>15 min Summer</td><td>64.354</td><td>0.344</td><td>0.4</td><td>5.3</td><td>O K</td></tr><tr><td>30 min Summer</td><td>64.400</td><td>0.390</td><td>0.5</td><td>7.1</td><td>Flood Risk</td></tr><tr><td>60 min Summer</td><td>64.435</td><td>0.425</td><td>0.5</td><td>8.8</td><td>Flood Risk</td></tr><tr><td>120 min Summer</td><td>64.456</td><td>0.446</td><td>0.6</td><td>9.8</td><td>Flood Risk</td></tr><tr><td>180 min Summer</td><td>64.461</td><td>0.451</td><td>0.6</td><td>10.1</td><td>Flood Risk</td></tr><tr><td>240 min Summer</td><td>64.463</td><td>0.453</td><td>0.6</td><td>10.2</td><td>Flood Risk</td></tr><tr><td>360 min Summer</td><td>64.461</td><td>0.451</td><td>0.6</td><td>10.1</td><td>Flood Risk</td></tr><tr><td>480 min Summer</td><td>64.456</td><td>0.446</td><td>0.6</td><td>9.9</td><td>Flood Risk</td></tr><tr><td>600 min Summer</td><td>64.451</td><td>0.441</td><td>0.6</td><td>9.6</td><td>Flood Risk</td></tr><tr><td>720 min Summer</td><td>64.444</td><td>0.434</td><td>0.6</td><td>9.2</td><td>Flood Risk</td></tr><tr><td>960 min Summer</td><td>64.431</td><td>0.421</td><td>0.5</td><td>8.6</td><td>Flood Risk</td></tr><tr><td>1440 min Summer</td><td>64.404</td><td>0.394</td><td>0.5</td><td>7.4</td><td>Flood Risk</td></tr><tr><td>2160 min Summer</td><td>64.371</td><td>0.361</td><td>0.4</td><td>6.0</td><td>Flood Risk</td></tr><tr><td>2880 min Summer</td><td>64.345</td><td>0.335</td><td>0.4</td><td>5.0</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>64.305</td><td>0.295</td><td>0.3</td><td>3.7</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>64.276</td><td>0.266</td><td>0.3</td><td>2.9</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>64.256</td><td>0.246</td><td>0.2</td><td>2.4</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>64.240</td><td>0.230</td><td>0.2</td><td>2.1</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>64.224</td><td>0.214</td><td>0.2</td><td>1.8</td><td>O K</td></tr><tr><td>15 min Winter</td><td>64.375</td><td>0.365</td><td>0.4</td><td>6.1</td><td>Flood Risk</td></tr></table> <table><tr><th>Storm Event</th><th>Rain (mm/hr)</th><th>Flooded Volume (m³)</th><th>Time-Peak (mins)</th></tr><tr><td>15 min Summer</td><td>126.830</td><td>0.0</td><td>18</td></tr><tr><td>30 min Summer</td><td>83.383</td><td>0.0</td><td>33</td></tr><tr><td>60 min Summer</td><td>52.299</td><td>0.0</td><td>62</td></tr><tr><td>120 min Summer</td><td>31.753</td><td>0.0</td><td>120</td></tr><tr><td>180 min Summer</td><td>23.426</td><td>0.0</td><td>150</td></tr><tr><td>240 min Summer</td><td>18.779</td><td>0.0</td><td>180</td></tr><tr><td>360 min Summer</td><td>13.642</td><td>0.0</td><td>248</td></tr><tr><td>480 min Summer</td><td>10.873</td><td>0.0</td><td>316</td></tr><tr><td>600 min Summer</td><td>9.115</td><td>0.0</td><td>384</td></tr><tr><td>720 min Summer</td><td>7.889</td><td>0.0</td><td>452</td></tr><tr><td>960 min Summer</td><td>6.276</td><td>0.0</td><td>586</td></tr><tr><td>1440 min Summer</td><td>4.539</td><td>0.0</td><td>840</td></tr><tr><td>2160 min Summer</td><td>3.278</td><td>0.0</td><td>1212</td></tr><tr><td>2880 min Summer</td><td>2.600</td><td>0.0</td><td>1584</td></tr><tr><td>4320 min Summer</td><td>1.872</td><td>0.0</td><td>2292</td></tr><tr><td>5760 min Summer</td><td>1.482</td><td>0.0</td><td>3008</td></tr><tr><td>7200 min Summer</td><td>1.235</td><td>0.0</td><td>3744</td></tr><tr><td>8640 min Summer</td><td>1.064</td><td>0.0</td><td>4488</td></tr><tr><td>10080 min Summer</td><td>0.938</td><td>0.0</td><td>5240</td></tr><tr><td>15 min Winter</td><td>126.830</td><td>0.0</td><td>18</td></tr></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	64.354	0.344	0.4	5.3	O K	30 min Summer	64.400	0.390	0.5	7.1	Flood Risk	60 min Summer	64.435	0.425	0.5	8.8	Flood Risk	120 min Summer	64.456	0.446	0.6	9.8	Flood Risk	180 min Summer	64.461	0.451	0.6	10.1	Flood Risk	240 min Summer	64.463	0.453	0.6	10.2	Flood Risk	360 min Summer	64.461	0.451	0.6	10.1	Flood Risk	480 min Summer	64.456	0.446	0.6	9.9	Flood Risk	600 min Summer	64.451	0.441	0.6	9.6	Flood Risk	720 min Summer	64.444	0.434	0.6	9.2	Flood Risk	960 min Summer	64.431	0.421	0.5	8.6	Flood Risk	1440 min Summer	64.404	0.394	0.5	7.4	Flood Risk	2160 min Summer	64.371	0.361	0.4	6.0	Flood Risk	2880 min Summer	64.345	0.335	0.4	5.0	O K	4320 min Summer	64.305	0.295	0.3	3.7	O K	5760 min Summer	64.276	0.266	0.3	2.9	O K	7200 min Summer	64.256	0.246	0.2	2.4	O K	8640 min Summer	64.240	0.230	0.2	2.1	O K	10080 min Summer	64.224	0.214	0.2	1.8	O K	15 min Winter	64.375	0.365	0.4	6.1	Flood Risk	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	126.830	0.0	18	30 min Summer	83.383	0.0	33	60 min Summer	52.299	0.0	62	120 min Summer	31.753	0.0	120	180 min Summer	23.426	0.0	150	240 min Summer	18.779	0.0	180	360 min Summer	13.642	0.0	248	480 min Summer	10.873	0.0	316	600 min Summer	9.115	0.0	384	720 min Summer	7.889	0.0	452	960 min Summer	6.276	0.0	586	1440 min Summer	4.539	0.0	840	2160 min Summer	3.278	0.0	1212	2880 min Summer	2.600	0.0	1584	4320 min Summer	1.872	0.0	2292	5760 min Summer	1.482	0.0	3008	7200 min Summer	1.235	0.0	3744	8640 min Summer	1.064	0.0	4488	10080 min Summer	0.938	0.0	5240	15 min Winter	126.830	0.0	18
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Thorogood House 34 Tolworth Close Surbition Surrey KT6 7EW		Land Adjacent To Meadow View, Blagore Lane, Wokingham, Berkshire, RG41 4AU			
Date Nov-2025 File PP1.srcx		Designed by IN Checked by RS			
XP Solutions		Source Control 2015.1			
<u>Summary of Results for 100 year Return Period (+40%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	64.422	0.412		0.5 8.2	Flood Risk
60 min Winter	64.459	0.449		0.6 10.0	Flood Risk
120 min Winter	64.483	0.473		0.6 11.3	Flood Risk
180 min Winter	64.488	0.478		0.6 11.6	Flood Risk
240 min Winter	64.489	0.479		0.6 11.6	Flood Risk
360 min Winter	64.484	0.474		0.6 11.3	Flood Risk
480 min Winter	64.476	0.466		0.6 10.9	Flood Risk
600 min Winter	64.467	0.457		0.6 10.4	Flood Risk
720 min Winter	64.457	0.447		0.6 9.9	Flood Risk
960 min Winter	64.437	0.427		0.5 8.9	Flood Risk
1440 min Winter	64.401	0.391		0.5 7.2	Flood Risk
2160 min Winter	64.357	0.347		0.4 5.4	O K
2880 min Winter	64.323	0.313		0.4 4.2	O K
4320 min Winter	64.276	0.266		0.3 2.9	O K
5760 min Winter	64.248	0.238		0.2 2.2	O K
7200 min Winter	64.225	0.215		0.2 1.8	O K
8640 min Winter	64.199	0.189		0.2 1.4	O K
10080 min Winter	64.178	0.168		0.1 1.1	O K
Storm Event		Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	
30 min Winter		83.383	0.0	32	
60 min Winter		52.299	0.0	60	
120 min Winter		31.753	0.0	116	
180 min Winter		23.426	0.0	168	
240 min Winter		18.779	0.0	190	
360 min Winter		13.642	0.0	266	
480 min Winter		10.873	0.0	342	
600 min Winter		9.115	0.0	414	
720 min Winter		7.889	0.0	486	
960 min Winter		6.276	0.0	626	
1440 min Winter		4.539	0.0	892	
2160 min Winter		3.278	0.0	1272	
2880 min Winter		2.600	0.0	1640	
4320 min Winter		1.872	0.0	2336	
5760 min Winter		1.482	0.0	3056	
7200 min Winter		1.235	0.0	3816	
8640 min Winter		1.064	0.0	4576	
10080 min Winter		0.938	0.0	5248	
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Date Nov-2025 File PP1.srcx	Designed by IN Checked by RS	
XP Solutions Source Control 2015.1		

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.500	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

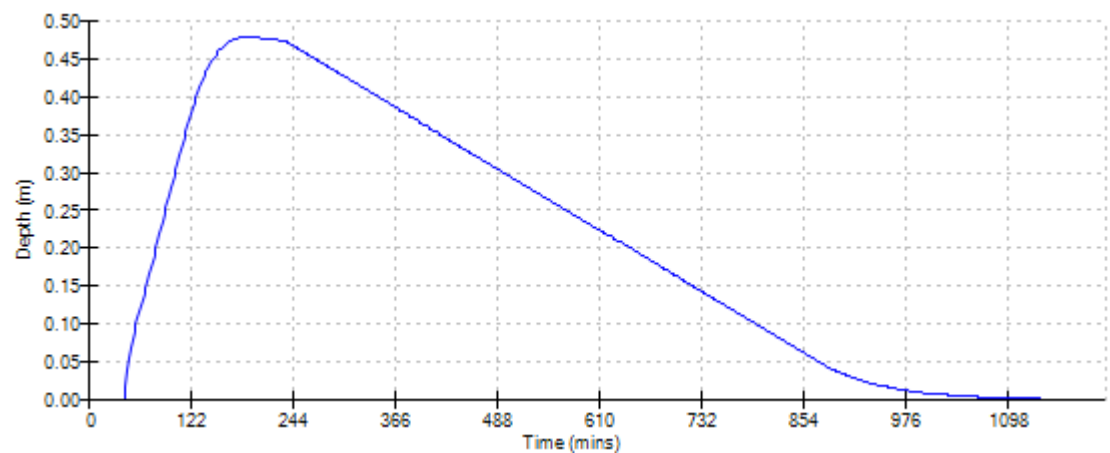
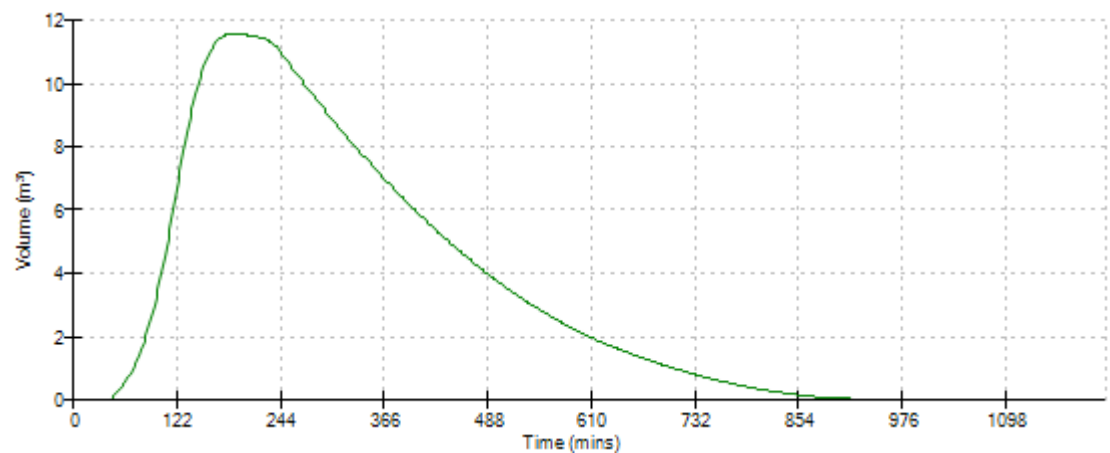
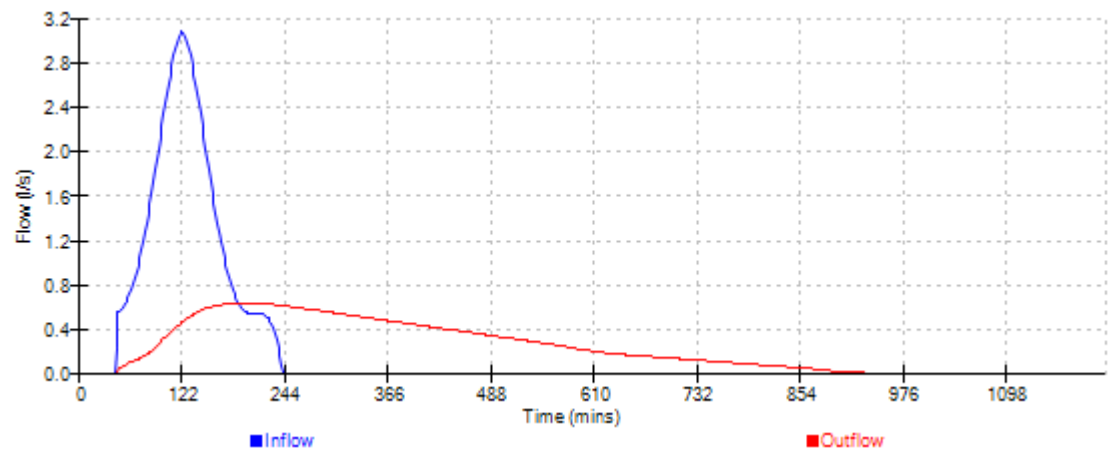
Total Area (ha) 0.028

Time (mins)	Area
From:	To: (ha)
0	4 0.028

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Thorogood House 34 Tolworth Close Surbition Surrey KT6 7EW	Land Adjacent To Meadow View, Blagore Lane, Wokingham, Berkshire, RG41 4AU																																																	
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<u>Model Details</u> Storage is Online Cover Level (m) 64.660 <u>Complex Structure</u> <u>Porous Car Park</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.03600</td> <td>Width (m)</td> <td>5.0</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> <td>Length (m)</td> <td>27.8</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>38.6</td> <td>Slope (1:X)</td> <td>51.5</td> </tr> <tr> <td>Safety Factor</td> <td>3.0</td> <td>Depression Storage (mm)</td> <td>5</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Evaporation (mm/day)</td> <td>3</td> </tr> <tr> <td>Invert Level (m)</td> <td>64.010</td> <td>Cap Volume Depth (m)</td> <td>0.450</td> </tr> </table> <u>Porous Car Park</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.03600</td> <td>Width (m)</td> <td>3.7</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> <td>Length (m)</td> <td>22.2</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>22.8</td> <td>Slope (1:X)</td> <td>64.2</td> </tr> <tr> <td>Safety Factor</td> <td>3.0</td> <td>Depression Storage (mm)</td> <td>5</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Evaporation (mm/day)</td> <td>3</td> </tr> <tr> <td>Invert Level (m)</td> <td>64.210</td> <td>Cap Volume Depth (m)</td> <td>0.450</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.03600	Width (m)	5.0	Membrane Percolation (mm/hr)	1000	Length (m)	27.8	Max Percolation (l/s)	38.6	Slope (1:X)	51.5	Safety Factor	3.0	Depression Storage (mm)	5	Porosity	0.30	Evaporation (mm/day)	3	Invert Level (m)	64.010	Cap Volume Depth (m)	0.450	Infiltration Coefficient Base (m/hr)	0.03600	Width (m)	3.7	Membrane Percolation (mm/hr)	1000	Length (m)	22.2	Max Percolation (l/s)	22.8	Slope (1:X)	64.2	Safety Factor	3.0	Depression Storage (mm)	5	Porosity	0.30	Evaporation (mm/day)	3	Invert Level (m)	64.210	Cap Volume Depth (m)	0.450
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Event: 240 min Winter



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<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 146 minutes. <table><tr><th>Storm Event</th><th>Max Level (m)</th><th>Max Depth (m)</th><th>Max Infiltration (l/s)</th><th>Max Volume (mE)</th><th>Status</th></tr><tr><td>15 min Summer</td><td>64.487</td><td>0.237</td><td>0.4</td><td>3.4</td><td>O K</td></tr><tr><td>30 min Summer</td><td>64.521</td><td>0.271</td><td>0.4</td><td>4.6</td><td>O K</td></tr><tr><td>60 min Summer</td><td>64.547</td><td>0.297</td><td>0.4</td><td>5.6</td><td>O K</td></tr><tr><td>120 min Summer</td><td>64.562</td><td>0.312</td><td>0.5</td><td>6.2</td><td>O K</td></tr><tr><td>180 min Summer</td><td>64.565</td><td>0.315</td><td>0.5</td><td>6.4</td><td>O K</td></tr><tr><td>240 min Summer</td><td>64.566</td><td>0.316</td><td>0.5</td><td>6.4</td><td>O K</td></tr><tr><td>360 min Summer</td><td>64.562</td><td>0.312</td><td>0.5</td><td>6.3</td><td>O K</td></tr><tr><td>480 min Summer</td><td>64.556</td><td>0.306</td><td>0.5</td><td>6.0</td><td>O K</td></tr><tr><td>600 min Summer</td><td>64.550</td><td>0.300</td><td>0.5</td><td>5.7</td><td>O K</td></tr><tr><td>720 min Summer</td><td>64.543</td><td>0.293</td><td>0.4</td><td>5.5</td><td>O K</td></tr><tr><td>960 min Summer</td><td>64.529</td><td>0.279</td><td>0.4</td><td>4.9</td><td>O K</td></tr><tr><td>1440 min Summer</td><td>64.505</td><td>0.255</td><td>0.4</td><td>4.0</td><td>O K</td></tr><tr><td>2160 min Summer</td><td>64.481</td><td>0.231</td><td>0.3</td><td>3.2</td><td>O K</td></tr><tr><td>2880 min Summer</td><td>64.463</td><td>0.213</td><td>0.3</td><td>2.7</td><td>O K</td></tr><tr><td>4320 min Summer</td><td>64.431</td><td>0.181</td><td>0.2</td><td>1.9</td><td>O K</td></tr><tr><td>5760 min Summer</td><td>64.404</td><td>0.154</td><td>0.2</td><td>1.3</td><td>O K</td></tr><tr><td>7200 min Summer</td><td>64.383</td><td>0.133</td><td>0.2</td><td>1.0</td><td>O K</td></tr><tr><td>8640 min Summer</td><td>64.368</td><td>0.118</td><td>0.1</td><td>0.8</td><td>O K</td></tr><tr><td>10080 min Summer</td><td>64.356</td><td>0.106</td><td>0.1</td><td>0.6</td><td>O K</td></tr><tr><td>15 min Winter</td><td>64.503</td><td>0.253</td><td>0.4</td><td>4.0</td><td>O K</td></tr></table> <table><tr><th>Storm Event</th><th>Rain (mm/hr)</th><th>Flooded Volume (mE)</th><th>Time- Peak (mins)</th></tr><tr><td>15 min Summer</td><td>126.830</td><td>0.0</td><td>18</td></tr><tr><td>30 min Summer</td><td>83.383</td><td>0.0</td><td>32</td></tr><tr><td>60 min Summer</td><td>52.299</td><td>0.0</td><td>62</td></tr><tr><td>120 min Summer</td><td>31.753</td><td>0.0</td><td>108</td></tr><tr><td>180 min Summer</td><td>23.426</td><td>0.0</td><td>140</td></tr><tr><td>240 min Summer</td><td>18.779</td><td>0.0</td><td>172</td></tr><tr><td>360 min Summer</td><td>13.642</td><td>0.0</td><td>240</td></tr><tr><td>480 min Summer</td><td>10.873</td><td>0.0</td><td>308</td></tr><tr><td>600 min Summer</td><td>9.115</td><td>0.0</td><td>374</td></tr><tr><td>720 min Summer</td><td>7.889</td><td>0.0</td><td>442</td></tr><tr><td>960 min Summer</td><td>6.276</td><td>0.0</td><td>570</td></tr><tr><td>1440 min Summer</td><td>4.539</td><td>0.0</td><td>822</td></tr><tr><td>2160 min Summer</td><td>3.278</td><td>0.0</td><td>1188</td></tr><tr><td>2880 min Summer</td><td>2.600</td><td>0.0</td><td>1556</td></tr><tr><td>4320 min Summer</td><td>1.872</td><td>0.0</td><td>2292</td></tr><tr><td>5760 min Summer</td><td>1.482</td><td>0.0</td><td>3000</td></tr><tr><td>7200 min Summer</td><td>1.235</td><td>0.0</td><td>3744</td></tr><tr><td>8640 min Summer</td><td>1.064</td><td>0.0</td><td>4416</td></tr><tr><td>10080 min Summer</td><td>0.938</td><td>0.0</td><td>5144</td></tr><tr><td>15 min Winter</td><td>126.830</td><td>0.0</td><td>18</td></tr></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (mE)	Status	15 min Summer	64.487	0.237	0.4	3.4	O K	30 min Summer	64.521	0.271	0.4	4.6	O K	60 min Summer	64.547	0.297	0.4	5.6	O K	120 min Summer	64.562	0.312	0.5	6.2	O K	180 min Summer	64.565	0.315	0.5	6.4	O K	240 min Summer	64.566	0.316	0.5	6.4	O K	360 min Summer	64.562	0.312	0.5	6.3	O K	480 min Summer	64.556	0.306	0.5	6.0	O K	600 min Summer	64.550	0.300	0.5	5.7	O K	720 min Summer	64.543	0.293	0.4	5.5	O K	960 min Summer	64.529	0.279	0.4	4.9	O K	1440 min Summer	64.505	0.255	0.4	4.0	O K	2160 min Summer	64.481	0.231	0.3	3.2	O K	2880 min Summer	64.463	0.213	0.3	2.7	O K	4320 min Summer	64.431	0.181	0.2	1.9	O K	5760 min Summer	64.404	0.154	0.2	1.3	O K	7200 min Summer	64.383	0.133	0.2	1.0	O K	8640 min Summer	64.368	0.118	0.1	0.8	O K	10080 min Summer	64.356	0.106	0.1	0.6	O K	15 min Winter	64.503	0.253	0.4	4.0	O K	Storm Event	Rain (mm/hr)	Flooded Volume (mE)	Time- Peak (mins)	15 min Summer	126.830	0.0	18	30 min Summer	83.383	0.0	32	60 min Summer	52.299	0.0	62	120 min Summer	31.753	0.0	108	180 min Summer	23.426	0.0	140	240 min Summer	18.779	0.0	172	360 min Summer	13.642	0.0	240	480 min Summer	10.873	0.0	308	600 min Summer	9.115	0.0	374	720 min Summer	7.889	0.0	442	960 min Summer	6.276	0.0	570	1440 min Summer	4.539	0.0	822	2160 min Summer	3.278	0.0	1188	2880 min Summer	2.600	0.0	1556	4320 min Summer	1.872	0.0	2292	5760 min Summer	1.482	0.0	3000	7200 min Summer	1.235	0.0	3744	8640 min Summer	1.064	0.0	4416	10080 min Summer	0.938	0.0	5144	15 min Winter	126.830	0.0	18
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Thorogood House 34 Tolworth Close Surbition Surrey KT6 7EW		Land Adjacent To Meadow View, Blagore Lane, Wokingham Berkshire, RG41 4AU				
Date Nov- 2025 File PP2.srcx		Designed by IN Checked by RS				
XP Solutions		Source Control 2015.1				
<u>Summary of Results for 100 year Return Period (+40%)</u>						
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (mE)	Status	
30 min Winter	64.539	0.289		0.4	5.3	O K
60 min Winter	64.568	0.318		0.5	6.5	O K
120 min Winter	64.584	0.334		0.5	7.2	O K
180 min Winter	64.587	0.337		0.5	7.3	O K
240 min Winter	64.586	0.336		0.5	7.3	O K
360 min Winter	64.579	0.329		0.5	7.0	O K
480 min Winter	64.569	0.319		0.5	6.6	O K
600 min Winter	64.559	0.309		0.5	6.1	O K
720 min Winter	64.549	0.299		0.4	5.7	O K
960 min Winter	64.529	0.279		0.4	4.9	O K
1440 min Winter	64.498	0.248		0.4	3.8	O K
2160 min Winter	64.469	0.219		0.3	2.8	O K
2880 min Winter	64.446	0.196		0.2	2.2	O K
4320 min Winter	64.401	0.151		0.2	1.3	O K
5760 min Winter	64.373	0.123		0.2	0.9	O K
7200 min Winter	64.353	0.103		0.1	0.6	O K
8640 min Winter	64.339	0.089		0.1	0.4	O K
10080 min Winter	64.328	0.078		0.1	0.3	O K
Storm Event	Rain (mm/hr)	Flooded Volume (mE)	Time- Peak (mins)			
30 min Winter	83.383	0.0	32			
60 min Winter	52.299	0.0	60			
120 min Winter	31.753	0.0	116			
180 min Winter	23.426	0.0	146			
240 min Winter	18.779	0.0	184			
360 min Winter	13.642	0.0	260			
480 min Winter	10.873	0.0	332			
600 min Winter	9.115	0.0	404			
720 min Winter	7.889	0.0	472			
960 min Winter	6.276	0.0	606			
1440 min Winter	4.539	0.0	852			
2160 min Winter	3.278	0.0	1232			
2880 min Winter	2.600	0.0	1616			
4320 min Winter	1.872	0.0	2332			
5760 min Winter	1.482	0.0	3008			
7200 min Winter	1.235	0.0	3744			
8640 min Winter	1.064	0.0	4416			
10080 min Winter	0.938	0.0	5144			
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Date Nov- 2025 File PP2.srcx	Designed by IN Checked by RS	
XP Solutions Source Control 2015.1		

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.500	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.019

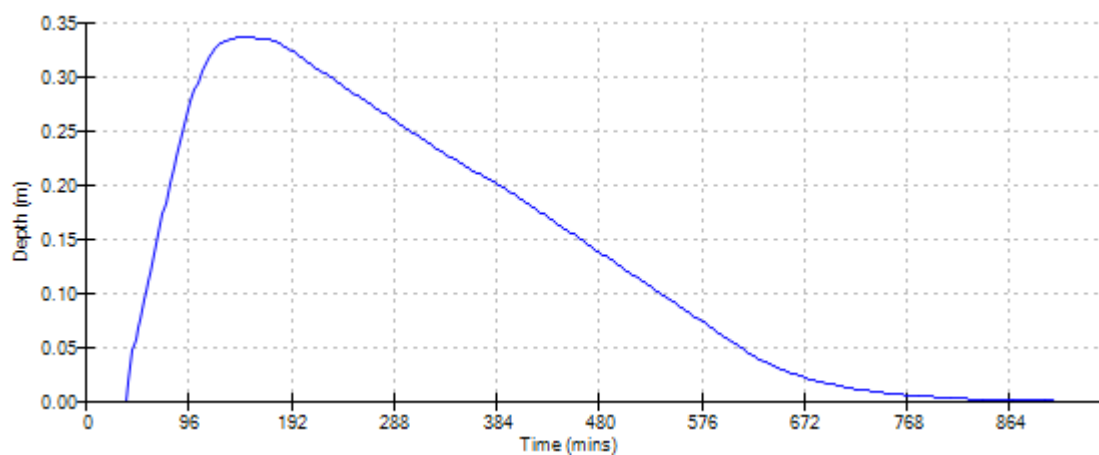
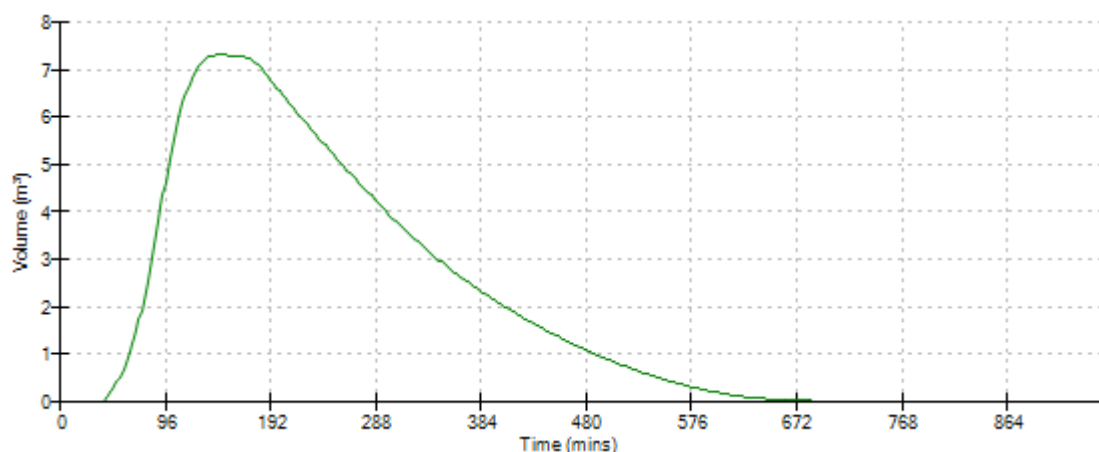
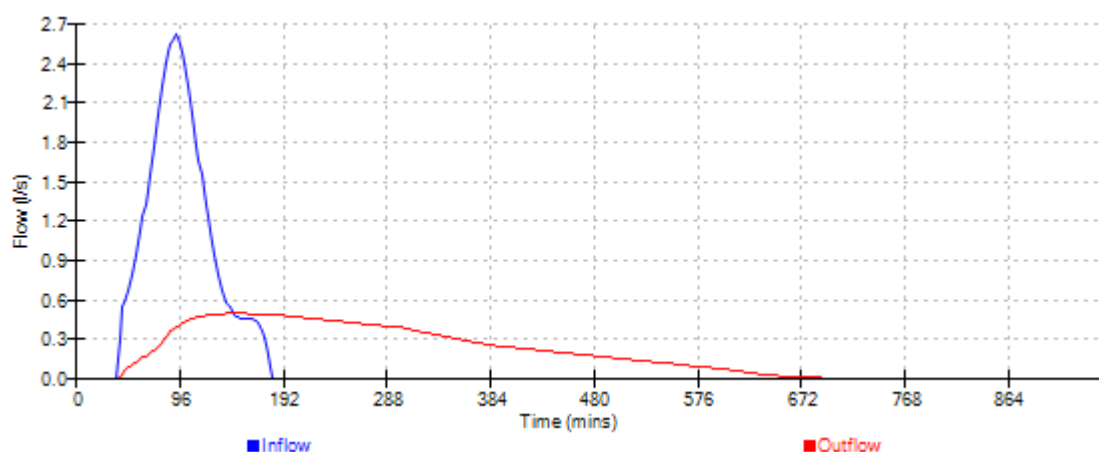
Time (mins)	Area
From To:	(ha)
0	4 0.019

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Thorogood House 34 Tolworth Close Surbition Surrey KT6 7EW	Land Adjacent To Meadow View, Blagore Lane, Wokingham Berkshire, RG41 4AU																																																	
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Model Details Storage is Online Cover Level (m) 64.900 Complex Structure Porous Car Park <table><tr><td>Infiltration Coefficient Base (m/hr)</td><td>0.03600</td><td>Width (m)</td><td>5.0</td></tr><tr><td>Membrane Percolation (mm/hr)</td><td>1000</td><td>Length (m)</td><td>31.0</td></tr><tr><td>Max Percolation (l/s)</td><td>43.1</td><td>Slope (1:X)</td><td>75.7</td></tr><tr><td>Safety Factor</td><td>3.0</td><td>Depression Storage (mm)</td><td>5</td></tr><tr><td>Porosity</td><td>0.30</td><td>Evaporation (mm/day)</td><td>3</td></tr><tr><td>Invert Level (m)</td><td>64.250</td><td>Cap Volume Depth (m)</td><td>0.450</td></tr></table> Porous Car Park <table><tr><td>Infiltration Coefficient Base (m/hr)</td><td>0.03600</td><td>Width (m)</td><td>3.0</td></tr><tr><td>Membrane Percolation (mm/hr)</td><td>1000</td><td>Length (m)</td><td>7.2</td></tr><tr><td>Max Percolation (l/s)</td><td>6.0</td><td>Slope (1:X)</td><td>0.0</td></tr><tr><td>Safety Factor</td><td>3.0</td><td>Depression Storage (mm)</td><td>5</td></tr><tr><td>Porosity</td><td>0.30</td><td>Evaporation (mm/day)</td><td>3</td></tr><tr><td>Invert Level (m)</td><td>64.450</td><td>Cap Volume Depth (m)</td><td>0.450</td></tr></table>			Infiltration Coefficient Base (m/hr)	0.03600	Width (m)	5.0	Membrane Percolation (mm/hr)	1000	Length (m)	31.0	Max Percolation (l/s)	43.1	Slope (1:X)	75.7	Safety Factor	3.0	Depression Storage (mm)	5	Porosity	0.30	Evaporation (mm/day)	3	Invert Level (m)	64.250	Cap Volume Depth (m)	0.450	Infiltration Coefficient Base (m/hr)	0.03600	Width (m)	3.0	Membrane Percolation (mm/hr)	1000	Length (m)	7.2	Max Percolation (l/s)	6.0	Slope (1:X)	0.0	Safety Factor	3.0	Depression Storage (mm)	5	Porosity	0.30	Evaporation (mm/day)	3	Invert Level (m)	64.450	Cap Volume Depth (m)	0.450
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Event: 180 min Winter



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<u>Summary of Results for 100 year Return Period (+40%)</u> Half Drain Time : 231 minutes. <table><tr><th>Storm Event</th><th>Max Level (m)</th><th>Max Depth (m)</th><th>Max Infiltration (l/s)</th><th>Max Volume (m³)</th><th>Status</th></tr><tr><td>15 min Summer</td><td>63.882</td><td>0.422</td><td>0.2</td><td>3.2</td><td>Flood Risk</td></tr><tr><td>30 min Summer</td><td>63.933</td><td>0.473</td><td>0.3</td><td>4.3</td><td>Flood Risk</td></tr><tr><td>60 min Summer</td><td>63.981</td><td>0.521</td><td>0.3</td><td>5.3</td><td>Flood Risk</td></tr><tr><td>120 min Summer</td><td>64.017</td><td>0.557</td><td>0.3</td><td>6.2</td><td>Flood Risk</td></tr><tr><td>180 min Summer</td><td>64.027</td><td>0.567</td><td>0.3</td><td>6.4</td><td>Flood Risk</td></tr><tr><td>240 min Summer</td><td>64.031</td><td>0.571</td><td>0.3</td><td>6.5</td><td>Flood Risk</td></tr><tr><td>360 min Summer</td><td>64.030</td><td>0.570</td><td>0.3</td><td>6.4</td><td>Flood Risk</td></tr><tr><td>480 min Summer</td><td>64.026</td><td>0.566</td><td>0.3</td><td>6.4</td><td>Flood Risk</td></tr><tr><td>600 min Summer</td><td>64.020</td><td>0.560</td><td>0.3</td><td>6.2</td><td>Flood Risk</td></tr><tr><td>720 min Summer</td><td>64.013</td><td>0.553</td><td>0.3</td><td>6.1</td><td>Flood Risk</td></tr><tr><td>960 min Summer</td><td>63.996</td><td>0.536</td><td>0.3</td><td>5.7</td><td>Flood Risk</td></tr><tr><td>1440 min Summer</td><td>63.962</td><td>0.502</td><td>0.3</td><td>4.9</td><td>Flood Risk</td></tr><tr><td>2160 min Summer</td><td>63.919</td><td>0.459</td><td>0.2</td><td>4.0</td><td>Flood Risk</td></tr><tr><td>2880 min Summer</td><td>63.886</td><td>0.426</td><td>0.2</td><td>3.3</td><td>Flood Risk</td></tr><tr><td>4320 min Summer</td><td>63.851</td><td>0.391</td><td>0.2</td><td>2.5</td><td>Flood Risk</td></tr><tr><td>5760 min Summer</td><td>63.835</td><td>0.375</td><td>0.2</td><td>2.2</td><td>Flood Risk</td></tr><tr><td>7200 min Summer</td><td>63.824</td><td>0.364</td><td>0.1</td><td>2.0</td><td>Flood Risk</td></tr><tr><td>8640 min Summer</td><td>63.815</td><td>0.355</td><td>0.1</td><td>1.8</td><td>Flood Risk</td></tr><tr><td>10080 min Summer</td><td>63.805</td><td>0.345</td><td>0.1</td><td>1.6</td><td>O K</td></tr><tr><td>15 min Winter</td><td>63.904</td><td>0.444</td><td>0.2</td><td>3.6</td><td>Flood Risk</td></tr></table> <table><tr><th>Storm Event</th><th>Rain (mm/hr)</th><th>Flooded Volume (m³)</th><th>Time-Peak (mins)</th></tr><tr><td>15 min Summer</td><td>126.830</td><td>0.0</td><td>18</td></tr><tr><td>30 min Summer</td><td>83.383</td><td>0.0</td><td>33</td></tr><tr><td>60 min Summer</td><td>52.299</td><td>0.0</td><td>62</td></tr><tr><td>120 min Summer</td><td>31.753</td><td>0.0</td><td>120</td></tr><tr><td>180 min Summer</td><td>23.426</td><td>0.0</td><td>172</td></tr><tr><td>240 min Summer</td><td>18.779</td><td>0.0</td><td>198</td></tr><tr><td>360 min Summer</td><td>13.642</td><td>0.0</td><td>260</td></tr><tr><td>480 min Summer</td><td>10.873</td><td>0.0</td><td>328</td></tr><tr><td>600 min Summer</td><td>9.115</td><td>0.0</td><td>398</td></tr><tr><td>720 min Summer</td><td>7.889</td><td>0.0</td><td>464</td></tr><tr><td>960 min Summer</td><td>6.276</td><td>0.0</td><td>598</td></tr><tr><td>1440 min Summer</td><td>4.539</td><td>0.0</td><td>864</td></tr><tr><td>2160 min Summer</td><td>3.278</td><td>0.0</td><td>1232</td></tr><tr><td>2880 min Summer</td><td>2.600</td><td>0.0</td><td>1584</td></tr><tr><td>4320 min Summer</td><td>1.872</td><td>0.0</td><td>2252</td></tr><tr><td>5760 min Summer</td><td>1.482</td><td>0.0</td><td>3000</td></tr><tr><td>7200 min Summer</td><td>1.235</td><td>0.0</td><td>3744</td></tr><tr><td>8640 min Summer</td><td>1.064</td><td>0.0</td><td>4496</td></tr><tr><td>10080 min Summer</td><td>0.938</td><td>0.0</td><td>5336</td></tr><tr><td>15 min Winter</td><td>126.830</td><td>0.0</td><td>18</td></tr></table>						Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status	15 min Summer	63.882	0.422	0.2	3.2	Flood Risk	30 min Summer	63.933	0.473	0.3	4.3	Flood Risk	60 min Summer	63.981	0.521	0.3	5.3	Flood Risk	120 min Summer	64.017	0.557	0.3	6.2	Flood Risk	180 min Summer	64.027	0.567	0.3	6.4	Flood Risk	240 min Summer	64.031	0.571	0.3	6.5	Flood Risk	360 min Summer	64.030	0.570	0.3	6.4	Flood Risk	480 min Summer	64.026	0.566	0.3	6.4	Flood Risk	600 min Summer	64.020	0.560	0.3	6.2	Flood Risk	720 min Summer	64.013	0.553	0.3	6.1	Flood Risk	960 min Summer	63.996	0.536	0.3	5.7	Flood Risk	1440 min Summer	63.962	0.502	0.3	4.9	Flood Risk	2160 min Summer	63.919	0.459	0.2	4.0	Flood Risk	2880 min Summer	63.886	0.426	0.2	3.3	Flood Risk	4320 min Summer	63.851	0.391	0.2	2.5	Flood Risk	5760 min Summer	63.835	0.375	0.2	2.2	Flood Risk	7200 min Summer	63.824	0.364	0.1	2.0	Flood Risk	8640 min Summer	63.815	0.355	0.1	1.8	Flood Risk	10080 min Summer	63.805	0.345	0.1	1.6	O K	15 min Winter	63.904	0.444	0.2	3.6	Flood Risk	Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)	15 min Summer	126.830	0.0	18	30 min Summer	83.383	0.0	33	60 min Summer	52.299	0.0	62	120 min Summer	31.753	0.0	120	180 min Summer	23.426	0.0	172	240 min Summer	18.779	0.0	198	360 min Summer	13.642	0.0	260	480 min Summer	10.873	0.0	328	600 min Summer	9.115	0.0	398	720 min Summer	7.889	0.0	464	960 min Summer	6.276	0.0	598	1440 min Summer	4.539	0.0	864	2160 min Summer	3.278	0.0	1232	2880 min Summer	2.600	0.0	1584	4320 min Summer	1.872	0.0	2252	5760 min Summer	1.482	0.0	3000	7200 min Summer	1.235	0.0	3744	8640 min Summer	1.064	0.0	4496	10080 min Summer	0.938	0.0	5336	15 min Winter	126.830	0.0	18
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Thorogood House 34 Tolworth Close Surbition Surrey KT6 7EW		Land Adjacent To Meadow View, Blagore Lane, Wokingham, Berkshire, RG41 4AU			
Date Nov-2025 File PP3.srcx		Designed by IN Checked by RS			
XP Solutions		Source Control 2015.1			
<u>Summary of Results for 100 year Return Period (+40%)</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	63.961	0.501	0.3	4.9	Flood Risk
60 min Winter	64.015	0.555	0.3	6.1	Flood Risk
120 min Winter	64.058	0.598	0.3	7.1	Flood Risk
180 min Winter	64.072	0.612	0.3	7.4	Flood Risk
240 min Winter	64.074	0.614	0.3	7.4	Flood Risk
360 min Winter	64.069	0.609	0.3	7.3	Flood Risk
480 min Winter	64.061	0.601	0.3	7.1	Flood Risk
600 min Winter	64.050	0.590	0.3	6.9	Flood Risk
720 min Winter	64.038	0.578	0.3	6.6	Flood Risk
960 min Winter	64.012	0.552	0.3	6.0	Flood Risk
1440 min Winter	63.961	0.501	0.3	4.9	Flood Risk
2160 min Winter	63.899	0.439	0.2	3.5	Flood Risk
2880 min Winter	63.860	0.400	0.2	2.7	Flood Risk
4320 min Winter	63.835	0.375	0.2	2.2	Flood Risk
5760 min Winter	63.820	0.360	0.1	1.9	Flood Risk
7200 min Winter	63.810	0.350	0.1	1.7	O K
8640 min Winter	63.776	0.316	0.1	1.3	O K
10080 min Winter	63.742	0.282	0.1	1.1	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	83.383	0.0	32		
60 min Winter	52.299	0.0	62		
120 min Winter	31.753	0.0	118		
180 min Winter	23.426	0.0	174		
240 min Winter	18.779	0.0	224		
360 min Winter	13.642	0.0	278		
480 min Winter	10.873	0.0	356		
600 min Winter	9.115	0.0	430		
720 min Winter	7.889	0.0	506		
960 min Winter	6.276	0.0	646		
1440 min Winter	4.539	0.0	912		
2160 min Winter	3.278	0.0	1276		
2880 min Winter	2.600	0.0	1584		
4320 min Winter	1.872	0.0	2292		
5760 min Winter	1.482	0.0	3056		
7200 min Winter	1.235	0.0	3888		
8640 min Winter	1.064	0.0	4664		
10080 min Winter	0.938	0.0	5344		
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Thorogood House 34 Tolworth Close Surbition Surrey KT6 7EW	Land Adjacent To Meadow View, Blagore Lane, Wokingham, Berkshire, RG41 4AU	
Date Nov-2025 File PP3.srcx	Designed by IN Checked by RS	
XP Solutions Source Control 2015.1		

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	100	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.500	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+40

Time Area Diagram

Total Area (ha) 0.017

Time (mins)		Area
From:	To:	(ha)
0	4	0.017

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Thorogood House 34 Tolworth Close Surbition Surrey KT6 7EW	Land Adjacent To Meadow View, Blagore Lane, Wokingham, Berkshire, RG41 4AU	
Date Nov-2025 File PP3.srcx	Designed by IN Checked by RS	
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Model Details

Storage is Online Cover Level (m) 64.110

Complex Structure

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.03600	Width (m)	5.0
Membrane Percolation (mm/hr)	1000	Length (m)	14.5
Max Percolation (l/s)	20.1	Slope (1:X)	18.0
Safety Factor	3.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	63.460	Cap Volume Depth (m)	0.450

Porous Car Park

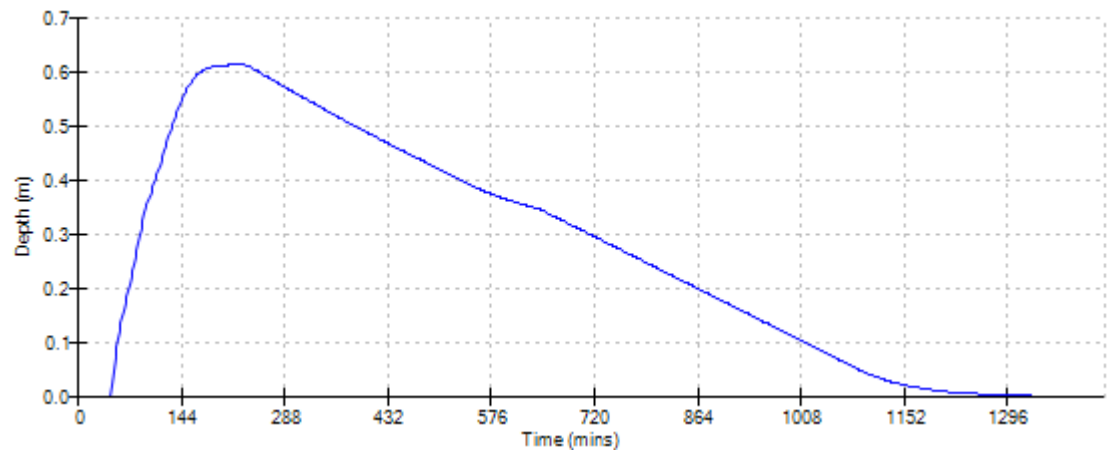
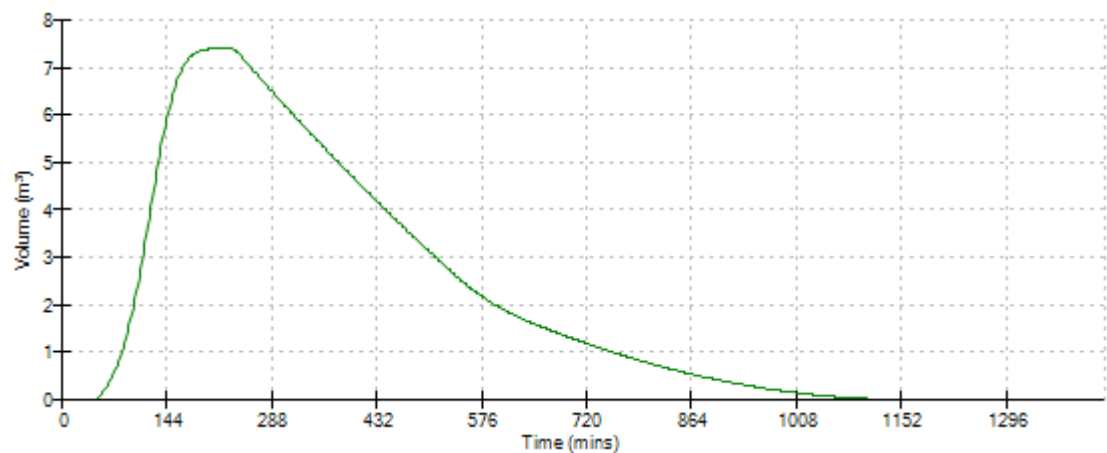
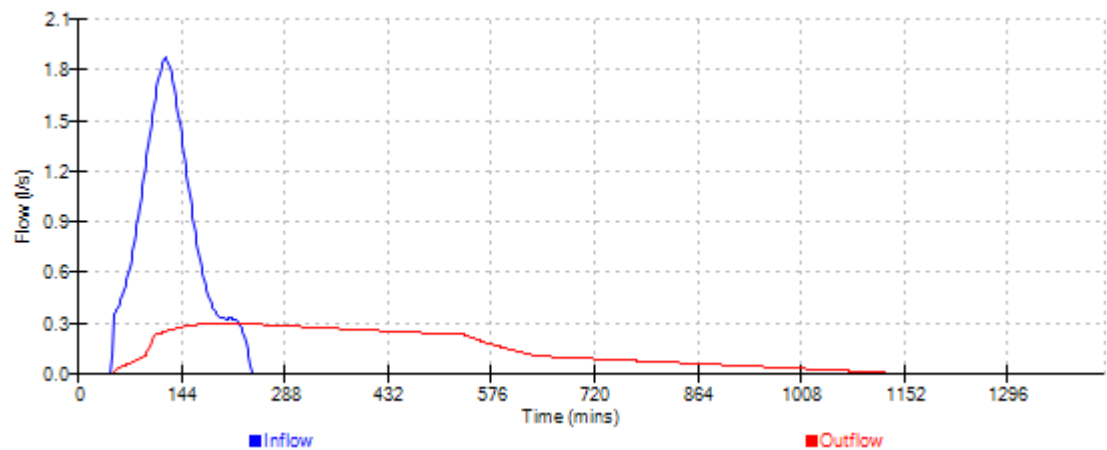
Infiltration Coefficient Base (m/hr)	0.03600	Width (m)	3.4
Membrane Percolation (mm/hr)	1000	Length (m)	9.9
Max Percolation (l/s)	9.4	Slope (1:X)	0.0
Safety Factor	3.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	63.807	Cap Volume Depth (m)	0.450

Porous Car Park

Infiltration Coefficient Base (m/hr)	0.03600	Width (m)	5.0
Membrane Percolation (mm/hr)	1000	Length (m)	9.0
Max Percolation (l/s)	12.5	Slope (1:X)	13.3
Safety Factor	3.0	Depression Storage (mm)	5
Porosity	0.30	Evaporation (mm/day)	3
Invert Level (m)	64.060	Cap Volume Depth (m)	0.450

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Event: 240 min Winter



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<u>Summary of Results for 1 year Return Period</u> Half Drain Time : 29 minutes. <table><thead><tr><th>Storm Event</th><th>Max Level (m)</th><th>Max Depth (m)</th><th>Max Infiltration (l/s)</th><th>Max Volume (m³)</th><th>Status</th></tr></thead><tbody><tr><td>15 min Summer</td><td>63.369</td><td>0.019</td><td>0.0</td><td>0.0</td><td>O K</td></tr><tr><td>30 min Summer</td><td>63.385</td><td>0.035</td><td>0.0</td><td>0.1</td><td>O K</td></tr><tr><td>60 min Summer</td><td>63.393</td><td>0.043</td><td>0.1</td><td>0.1</td><td>O K</td></tr><tr><td>120 min Summer</td><td>63.398</td><td>0.048</td><td>0.1</td><td>0.2</td><td>O K</td></tr><tr><td>180 min Summer</td><td>63.400</td><td>0.050</td><td>0.1</td><td>0.2</td><td>O K</td></tr><tr><td>240 min Summer</td><td>63.400</td><td>0.050</td><td>0.1</td><td>0.2</td><td>O K</td></tr><tr><td>360 min Summer</td><td>63.400</td><td>0.050</td><td>0.1</td><td>0.2</td><td>O K</td></tr><tr><td>480 min 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Thorogood House 34 Tolworth Close Surbition Surrey KT6 7EW		Land Adjacent To Meadow View, Blagore Lane, Wokingham, Berkshire, RG41 4AU			
Date Nov-2025 File PP4.srcx		Designed by IN Checked by RS			
XP Solutions		Source Control 2015.1			
<u>Summary of Results for 1 year Return Period</u>					
Storm Event	Max Level (m)	Max Depth (m)	Max Infiltration (l/s)	Max Volume (m³)	Status
30 min Winter	63.392	0.042	0.1	0.1	O K
60 min Winter	63.399	0.049	0.1	0.2	O K
120 min Winter	63.403	0.053	0.1	0.2	O K
180 min Winter	63.403	0.053	0.1	0.2	O K
240 min Winter	63.402	0.052	0.1	0.2	O K
360 min Winter	63.400	0.050	0.1	0.2	O K
480 min Winter	63.397	0.047	0.1	0.2	O K
600 min Winter	63.394	0.044	0.1	0.2	O K
720 min Winter	63.392	0.042	0.1	0.1	O K
960 min Winter	63.389	0.039	0.1	0.1	O K
1440 min Winter	63.384	0.034	0.0	0.1	O K
2160 min Winter	63.379	0.029	0.0	0.1	O K
2880 min Winter	63.376	0.026	0.0	0.1	O K
4320 min Winter	63.372	0.022	0.0	0.0	O K
5760 min Winter	63.370	0.020	0.0	0.0	O K
7200 min Winter	63.368	0.018	0.0	0.0	O K
8640 min Winter	63.367	0.017	0.0	0.0	O K
10080 min Winter	63.366	0.016	0.0	0.0	O K
Storm Event	Rain (mm/hr)	Flooded Volume (m³)	Time-Peak (mins)		
30 min Winter	18.555	0.0	31		
60 min Winter	11.729	0.0	50		
120 min Winter	7.265	0.0	86		
180 min Winter	5.463	0.0	120		
240 min Winter	4.458	0.0	154		
360 min Winter	3.345	0.0	216		
480 min Winter	2.714	0.0	278		
600 min Winter	2.305	0.0	340		
720 min Winter	2.017	0.0	398		
960 min Winter	1.634	0.0	520		
1440 min Winter	1.215	0.0	754		
2160 min Winter	0.904	0.0	1104		
2880 min Winter	0.733	0.0	1440		
4320 min Winter	0.545	0.0	2204		
5760 min Winter	0.442	0.0	2936		
7200 min Winter	0.376	0.0	3640		
8640 min Winter	0.329	0.0	4360		
10080 min Winter	0.294	0.0	5040		
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Date Nov-2025 File PP4.srcx	Designed by IN Checked by RS	
XP Solutions Source Control 2015.1		

Rainfall Details

Rainfall Model	FSR	Winter Storms	Yes
Return Period (years)	1	Cv (Summer)	0.750
Region	England and Wales	Cv (Winter)	0.840
M5-60 (mm)	18.500	Shortest Storm (mins)	15
Ratio R	0.400	Longest Storm (mins)	10080
Summer Storms	Yes	Climate Change %	+0

Time Area Diagram

Total Area (ha) 0.006

Time (mins)	Area
From:	To: (ha)
0	4 0.006

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<u>Model Details</u> Storage is Online Cover Level (m) 64.000 <u>Complex Structure</u> <u>Porous Car Park</u> <table> <tr> <td>Infiltration Coefficient Base (m/hr)</td> <td>0.03600</td> <td>Width (m)</td> <td>5.0</td> </tr> <tr> <td>Membrane Percolation (mm/hr)</td> <td>1000</td> <td>Length (m)</td> <td>11.5</td> </tr> <tr> <td>Max Percolation (l/s)</td> <td>16.0</td> <td>Slope (1:X)</td> <td>104.5</td> </tr> <tr> <td>Safety Factor</td> <td>3.0</td> <td>Depression Storage (mm)</td> <td>5</td> </tr> <tr> <td>Porosity</td> <td>0.30</td> <td>Evaporation (mm/day)</td> <td>3</td> </tr> <tr> <td>Invert Level (m)</td> <td>63.350</td> <td>Cap Volume Depth (m)</td> <td>0.450</td> </tr> </table>			Infiltration Coefficient Base (m/hr)	0.03600	Width (m)	5.0	Membrane Percolation (mm/hr)	1000	Length (m)	11.5	Max Percolation (l/s)	16.0	Slope (1:X)	104.5	Safety Factor	3.0	Depression Storage (mm)	5	Porosity	0.30	Evaporation (mm/day)	3	Invert Level (m)	63.350	Cap Volume Depth (m)	0.450
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