Quobleigh Breach Parcel of Development,
One Horton Heath, Hampshire

Drainage Strategy

For

Eastleigh Borough Council

motion

Document Control Sheet

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One Horton Heath, Hampshire

Eastleigh Borough Council

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Motion
84 North Street
Guildford
GU1 4AU
T 01483 531300
F 01483 531333
E info@motion.co.uk
W www.motion.co.uk

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1.0 Introduction

1.1 Motion has been commissioned by Eastleigh Borough Council to prepare this Drainage Strategy for a reserved matters application for the Quobleigh Breach Parcel of Development, One Horton Heath, Hampshire ("the Site"). It presents information about the Drainage Strategy for an *Application for the approval of reserved matters (appearance, layout, scale and landscaping) for the development of 269 dwellings, associated open space, landscaping, parking and other associated works, pursuant to outline permission O/20/89498.*

1.2 The approximately 7.03 hectares Site is located in the north-western section of the One Horton Heath development and comprises of agricultural land. The Site is intersected by the existing Fir Tree Lane, which runs east – west and is closed to vehicles from the site, and a new link road named 'The Avenue', which runs north - south. A single Grade II listed farmhouse, Fir Tree Farm, is located to the east of the approximate northern half of the Site. Fir Tree Farmhouse sits outside of the Site. A Site Location Plan is included in **Appendix A**. The proposed development Site Layout Plan is included in **Appendix B**.

1.3 The Drainage Strategy builds on the work prepared by *PFA Consulting*[1][2] and *Odyssey*[3] for Eastleigh Borough Council outline planning application Ref O/20/89498 and provides a more detailed analysis of the Site with respect to the foul and surface water drainage.

1.4 The Decision Notice for outline planning application Ref O/20/89498 Dated Monday 27 October 2025 includes the conditions below.

Condition 58

Each reserved matters application shall include details of a scheme to address the flood risk issues raised below and no development shall commence until such time as this scheme has been submitted to, and approved in writing by, the local planning authority:

- *Ensure the development is flood resilient by ensuring all finished floor levels are built 600mm above the 1 in 100yr design flood level with the latest climate change allowances.*
- *Ensure no development is built within flood zones 2 and 3*
- *Ensure development is directed away from any watercourse*
- *Ensure any watercourse crossings are detailed and do not increase the risk of flooding either on or off-site.*

The scheme shall be fully implemented and subsequently maintained, in accordance with the scheme's timing/phasing arrangements, or within any other period as may subsequently be agreed, in writing, by the local planning authority.

Reason: To reduce the risk of flooding to the proposed development and its future users and for compliance with Policy DM5 of the Eastleigh Borough Local Plan

Condition 59

Construction of the development of each reserved matters phase (excluding site clearance) shall not commence until full details of any proposed means of foul sewerage have been submitted to, and approved in writing by, the Local Planning Authority in consultation with Southern Water. These shall be in accordance with the submitted Utilities and Foul Water Statement 26114-RP-IE-002 Issue 02, May

[1] *PFA Consulting, Flood Risk Assessment, Job No G277, Issue 2, Dated 27.05.2021*
[2] *PFA Consulting, Flood Risk Assessment Addendum (O/20/89498), Job No G277-FN14, Dated June 2022*
[3] *Odyssey, Flood Risk Assessment Addendum (O/20/89498), Project No 19-367, Revision B, Dated December 2020*

2022. The approved details shall be fully implemented prior to the first occupation of development within each reserved matters phase.

Reason: to provide satisfactory foul drainage and to prevent flooding.

Condition 60

No development on a phase shall take place until a scheme for the provision and management of a minimum 10 metre wide (and greater where possible) ecological buffer zone alongside the watercourses within that phase has been submitted to, and approved in writing by, the local planning authority. Thereafter, the development shall be carried out in accordance with the approved scheme. Any subsequent variations shall be agreed in writing by the local planning authority, in which case the development shall be carried out in accordance with the amended scheme. The buffer zone scheme shall be free from built development including lighting, domestic gardens and formal landscaping. The scheme shall include:

- *plans showing the extent and layout of any buffer zones*
- *details of any proposed planting scheme within the buffer zone(s) which must be of native species suitable for the locality*
- *details demonstrating how the buffer zone(s) will be protected during construction and operation, and managed over the longer term including adequate financial provision and named body responsible for management plus production of detailed management plan.*
- *details of any proposed green infrastructure located adjacent to the ecological buffer zones.*
    - *details of bridge crossings. The number of crossings must be minimal to minimise severance of watercourses and clear span rather than culverts.*
    - *details of any mammal crossings or ledges*
    - *a detailed watercourse restoration plan including fish/eel passage improvement where required*
    - *details of how undisturbed otter passage will be secured through the site both during construction and operation.*
    - *Details of follow up surveys to determine what avoidance or mitigation is required and to monitor mitigation and habitat restoration/enhancement.*

Reason: For compliance with Policy DM1 of the Eastleigh Borough Local Plan and the NPPF. Land alongside watercourses is particularly valuable for wildlife and it is essential this is protected. Riparian buffer zones across the site are essential for the movement of wildlife and in particular for otter. The site is located close to the watershed between the Itchen and Hamble River catchments and is a key crossing point for otter to move between these catchments. Buffer zones should be protected from disturbance by people and dogs and unlit. Lighting of bridge crossings and riverine buffer zones should be avoided. If this is deemed essential, then it should be directed away from the watercourse to avoid unnecessary light spillage.

Condition 61

No development of each reserved matters phase shall begin until a detailed final surface water drainage scheme, based on the submitted PFA Flood Risk Assessment G277-FN14- FRA Addendum dated June 22 & submitted 13 Sept 2022 has been submitted and approved in writing by the Local Planning Authority. The submitted details shall include:

a) at least three forms of naturalised filtration (as proposed) and supported by hydrological studies to demonstrate that the drainage system will not adversely affect the integrity of the River Itchen Special Area of Conservation (SAC) and will contribute towards achieving the

conservation objectives of the SAC by improving water quality and reducing fine particle sediment inputs;

b) *details of how the scheme will contribute to reductions in sediments, silts, nitrogen and phosphorous in receiving waters including the River Itchen SAC;*

c) *A technical summary highlighting any changes to the design from that within the approved Flood Risk Assessment.*

d) *Updated drainage plans and calculations as appropriate to include type, layout and dimensions of drainage features including references to link to the drainage calculations.*

e) *Cross and long sections of proposed basins to include exceedance flow paths in the event of flow control blockage between basins I & J.*

f) *Details of protection measures to minimise blockage risk to flow control devices.*

g) *Evidence that urban creep has been included within the calculations.*

h) *Updated exceedance plans demonstrating the extent of flooding expected at the 1:100 + climate change event. These must also detail how flows are likely to behave at the apparent low spots where no onward flow path is identified.*

i) *Details of land drainage provision to allow suitable drainage of green areas where overland flow routes are disrupted as a result of the development.*

j) *Confirmation that the SuDS infrastructure is in place or will be in place prior to the development of the related plot.*

k) *Confirmation that sufficient water quality measures have been included to satisfy the methodology in the Ciria SuDS Manual C753.*

l) *Sustainable drainage elements with attenuation, storage and treatment capacities incorporated as set out in the CRIA SuDS Manual C697 CIRIA SuDS Manual C753, or equivalent and updated local or national design guidance where available. If SuDS are proposed as part of the open space provision on a site, gradients should generally not exceed 1:4;*

m) *Details for the long-term maintenance, management, adoption and monitoring arrangements for the surface water drainage system. The submitted details shall include:*

   i) *Maintenance schedules for each drainage feature type*

   ii) *A plan detailing ownership of each drainage feature*

   iii) *Confirmation that adoption of features is accepted by Southern Water/Highways Authority/other public body*

   iv) *Details of protection measures*

   v) *Specify the responsibilities of each party for the implementation of the SuDS scheme.*

   vi) *Specify a timetable for implementation.*

The sustainable drainage system shall be implemented and thereafter managed and maintained in accordance with the approved details.

Reason: to prevent risk of flooding and ensure satisfactory drainage for the development in accordance with Policies DM3, DM5, DM6 and DM11 of the Local Plan.

1.5 This Drainage Strategy follows the guidance set out in:

- National Planning Policy Framework[4] (NPPF)
- Planning Practice Guidance (PPG) to the NPPF
- relevant policies of the Eastleigh Borough Council Local Plan (2016 - 2036)
- CIRIA C753 The SuDS Manual 2015
- Environment Agency Rainfall Runoff Management for Developments
- National standards for sustainable drainage systems (SuDS) Guidance Updated 30 July 2025

1.6 This drainage strategy report pertains only to the design of the drainage system for the built Site. It does not provide details of how the Site will be drained during the construction phase. This is considered to be temporary works and can only be prescribed and provided by the eventual appointed contractor.

1.7 Similarly, this report does not provide information on how the drainage infrastructure will be protected during the construction phase of the project. The provision of this information will be the responsibility of the appointed contractor.

[4] https://www.gov.uk/government/publications/national-planning-policy-framework--2

2.0 Condition 58 Scheme to Address the Flood Risk Issues

- **Ensure the development is flood resilient by ensuring all finished floor levels are built 600mm above the 1 in 100yr design flood level with the latest climate change allowances.**
- **Ensure no development is built within flood zones 2 and 3**
- **Ensure development is directed away from any watercourse**
- **Ensure any watercourse crossings are detailed and do not increase the risk of flooding either on or off-site.**

2.1 Please see *Motion drawing number 2103078-0501-P04 [Drainage Strategy]* in **Appendix C** showing the River Flood Zone Extents based on the undefended Flood Zone 2 and 3 Datasets including a 'Central' climate change allowance for the 2080s epoch (2070-2125) available to download from the *Defra Data Services Platform*[5].

2.2 Based on the Topographical Survey in **Appendix C** and *Motion drawing number 2103078-0311-P03 [Proposed Levels]* submitted for the reserved matters application, where the River Flood Zone Extents based on the undefended Flood Zone 2 and 3 Datasets including a 'Central' climate change allowance for the 2080s epoch (2070-2125) pass closest to the proposed development (i.e. Block A Plots 25 to 47 and Plot 221), it is possible to provide finished floor levels (FFLs) well in excess of 600mm (i.e. approximately 3000mm and 1300mm higher respectively).

2.3 The Site - including the proposed Northern Pumping Station, recently constructed Strategic SuDS Features A and E and 'The Avenue' link road drainage network via which the Site connects to the Strategic SuDS - is in Flood Zone 1. The proposed use of the Site is classified as 'More vulnerable' Development under the NPPF and is appropriate in Flood Zone 1. Therefore, the Development is appropriately located.

2.4 Please see Sections 5.31 to 5.34 below ensuring the proposed ordinary watercourse culvert does not increase the risk of flooding either on or off-site.

[5] https://environment.data.gov.uk/dataset/610d6830-0637-4f5b-b6ce-61f5fa5635d3

3.0 Condition 59 Full Details of any Proposed Means of Foul Sewerage

3.1 Motions drawing number 2103078-0501-P04 [Drainage Strategy] is in **Appendix C**.

3.2 *Drawings 10413-SEG3-360 T1 (DRAINAGE LAYOUT SHEET 4 OF 6 "THE AVENUE NORTHERN SECTION")*[6] and *10413-SEG3-361 T1 (DRAINAGE LAYOUT SHEET 5 OF 6 "THE AVENUE NORTHERN SECTION")*[7] available to view on the Eastleigh Borough Council planning portal for discharge of condition application DC/23/94783 show connection points for foul water drainage from all three areas of the Site.

3.3 *Drawing 10413-SEG3-361 T1 (DRAINAGE LAYOUT SHEET 5 OF 6 "THE AVENUE NORTHERN SECTION")* [8] also shows the foul water drainage connection to the proposed Northern Pumping Station location.

3.4 *Drawing 10413-SEG3-362 T1 (DRAINAGE LAYOUT SHEET 6 OF 6 "THE AVENUE NORTHERN SECTION")*[9] available to view on the Eastleigh Borough Council planning portal for discharge of condition application DC/23/94783 shows that the proposed Northern Pumping Station will pump foul water to the north and the *initial submission to Southern Water for approval*[10] available to view on the Eastleigh Borough Council planning portal for application DC/23/94929 states the following:

'The Northern Pump Station deals with the following elements which comprises elements via gravity plus the pumped flows from the Southern Pump Station that enter the gravity system draining to the pump station. The Northern Pump Station discharges all the flows off site.

- 1175 Residential dwellings.
- 5500m^2 of Employment area
- 2787m^2 (30000 ft^2) Mixed use area
- Pump flows entering the gravity system from the Southern Pump Station'.

3.5 The Homestal and the Folds parcels to the east will connect to proposed foul water manhole F8 shown on *Motion drawing number 2103078-0501-P04 [Drainage Strategy]* in **Appendix C**.

[6] *Rueby & Stagg Ltd, Drawing 10413-SEG3-360 T1 (DRAINAGE LAYOUT SHEET 4 OF 6 "THE AVENUE NORTHERN SECTION"), Dated 06/10/22*
[7] *Rueby & Stagg Ltd, Drawing 10413-SEG3-361 T1 (DRAINAGE LAYOUT SHEET 5 OF 6 "THE AVENUE NORTHERN SECTION"), Dated 06/10/22*
[8] *Rueby & Stagg Ltd, Drawing 10413-SEG3-361 T1 (DRAINAGE LAYOUT SHEET 5 OF 6 "THE AVENUE NORTHERN SECTION"), Dated 06/10/22*
[9] *Rueby & Stagg Ltd, Drawing 10413-SEG3-361 T1 (DRAINAGE LAYOUT SHEET 5 OF 6 "THE AVENUE NORTHERN SECTION"), Dated 06/10/22*
[10] *PDAS, One Horton Heath – Northern Pump Station Issue A, Referenced PR16417, Dated 11.06.2022*

4.0 Condition 60 Scheme for the Provision and Management of a Minimum 10 Metre Wide (and Greater Where Possible) Ecological Buffer Zone Alongside the Watercourses

4.1 Please see the Biodiversity Net Gain (BNG) Report submitted for the reserved matters application that clarifies the ordinary watercourses onsite are agricultural ditches. On this basis, it is concluded that 10 Metre Wide (and Greater Where Possible) Ecological Buffer Zones Alongside the agricultural ditches are not required post development.

5.0 Condition 61 Surface Water Drainage Scheme

a) at least three forms of naturalised filtration (as proposed) and supported by hydrological studies to demonstrate that the drainage system will not adversely affect the integrity of the River Itchen Special Area of Conservation (SAC) and will contribute towards achieving the conservation objectives of the SAC by improving water quality and reducing fine particle sediment inputs

5.1 The Site will drain to the recently constructed Strategic SuDS Features A and E (for the most part via the recently constructed 'The Avenue' link road drainage network) as shown in *Motion drawing number 2103078-0501-P04 [Drainage Strategy]* in **Appendix C**.

5.2 The approved *PFA Consulting Flood Risk Assessment Addendum*[11] states 'The Strategic SuDS Features will incorporate the following treatment processes as a minimum: -

- Sediment forebays at inlets.
- Extensive wetland areas incorporating micro pools.
- Wetland planting.
- Secondary sedimentation areas prior to outlets.'

5.3 Therefore, three forms of naturalised filtration will be provided by the recently constructed Strategic SuDS Features A and E.

5.4 The approved *PFA Consulting Flood Risk Assessment Addendum*[12] also states 'It is proposed that surface water runoff from all development areas on the site will be treated by a SuDS Management Train consisting of source control techniques, strategic SuDS features and mechanical separators' and 'In addition to the upstream source control measures, runoff from all development areas on the site will pass through at least one Strategic SuDS Feature'.

5.5 With reference to the proposed exceedance flow routes in the Drainage Strategy in **Appendix C,** it is possible for the majority of the low traffic roads to drain to the proposed surface water drainage network either via Unlined Type C No Infiltration Pervious Pavements [300mm 4/40 coarse graded aggregate to BS EN 7533-13 subbase with 30% void ratio] with collector pipe(s); Bioretention Areas with underdrains; or the existing Road Swale (where the new road junction from Development Catchment Area A is proposed post development).

5.6 Lastly, with regards to contributing towards achieving the conservation objectives of the SAC by improving water quality and reducing fine particle sediment inputs, please see the Habitats Regulations Assessment (HRA) submitted for the reserved matters application demonstrating that the drainage system will not adversely affect the integrity of the River Itchen Special Area of Conservation (SAC) and will contribute towards achieving the conservation objectives of the SAC by improving water quality and reducing fine particle sediment inputs.

[11] *PFA Consulting, Flood Risk Assessment Addendum (O/20/89498), Job No G277-FN14, Dated June 2022*
[12] *PFA Consulting, Flood Risk Assessment Addendum (O/20/89498), Job No G277-FN14, Dated June 2022*

b) details of how the scheme will contribute to reductions in sediments, silts, nitrogen and phosphorous in receiving waters including the River Itchen SAC

5.7 Please see the HRA and Nutrient Neutrality Study Report submitted for the reserved matters application providing details of how the scheme will contribute to reductions in sediments, silts, nitrogen and phosphorous in receiving waters including the River Itchen SAC.

c) A technical summary highlighting any changes to the design from that within the approved Flood Risk Assessment

Existing Drainage Regime

5.8 The Site will drain to the recently constructed Strategic SuDS Features A and E (for the most part via the recently constructed 'The Avenue' link road drainage network) shown in *Motion drawing number 2103078-0501-P04 [Drainage Strategy]* in **Appendix C**.

5.9 The recently constructed Strategic SuDS Features A and E discharge at a controlled rate in line with the discharge rates accounted for in Table C of the *approved Flood Risk Assessment prepared by PFA Consulting*[13]. Please see Table C in **Figure 2.1** below, specifically the assumed impermeability areas of 1.584 and 2.755 ha for Development Catchment Areas A and E, that are also the impermeable areas used in the MicroDrainage Source Control Calculations for Basins A and E in the *approved Flood Risk Assessment prepared by PFA Consulting*[14].

Figure 2.1: Table C of the approved Flood Risk Assessment prepared by PFA Consulting submitted for OPA O/20/89498

Table C: Runoff Rates and Storage Volumes

Dev Catchment Area	Area (ha)	Assumed % Imperm-ability	Catchment Q_{MED} (l/s)	1 in 1 yr Storage Volume (m^3)	Resulting Discharge (l/s)	1 in 100 yr + 40% CC Storage Vol. (m^3)	Resulting Discharge (l/s)
A	2.037	65	18.39	165	17.8	802.0	18.3
	0.260	100					
B	3.750	65	30.04	260	28.1	1224.1	29.9
C	6.808	65	54.53	405	50.1	2171.9	54.4
D	3.381	65	27.08	244.3	23.7	1111.5	27
E	3.650	65	32.30	337	24.8	1706.4	32.3
	0.382	100					
F	3.360	65	26.92	241	23.9	1103.4	26.9
G	2.762	65	41.47	267	34.7	1449.7	40.3
	2.415	50					
H	1.603	30	70.83	683	44.1	2694.1	70.8
	0.409	100					
	6.831	65					
I	1.556	65	29.60	314	26.7	1338.5	28.7
J	2.139	65					
K	1.696	65	13.58	127	11.0	560.3	13.5
L	3.894	65	39.57	433	32.5	1859.9	39.5
	1.046	100					
M	2.213	65	17.73	156	16.2	727.6	17.7
N	5.759	65	46.13	477	31.1	1924.3	46.0
EM	2.029	85	16.25	150	15.5	877.9	16.3

[13] *PFA Consulting, Flood Risk Assessment, Job No G277, Issue 2, Dated 27.05.2021*
[14] *PFA Consulting, Flood Risk Assessment, Job No G277, Issue 2, Dated 27.05.2021*

Reserved Matters Drainage Design Comparison with Previous Drainage Design

5.10 *Drawing 10413-SEG3-361 T1 (DRAINAGE LAYOUT SHEET 5 OF 6 "THE AVENUE NORTHERN SECTION")*[15]; *Drawing 10413-SEG3-362 T1 (DRAINAGE LAYOUT SHEET 6 OF 6 "THE AVENUE NORTHERN SECTION")*[16]; and the *Drainage Calculations Northern Section approved as part of the discharge of condition application DC/23/94783 for Condition 3 Final Surface Water Drainage and Condition 20 Watercourse Buffer details of F/21/91185* shows two connection points with the capacity to convey surface water runoff from 1.314 Ha of Dev Catchment Area A to 'The Avenue' link road drainage network, prior to discharge to the recently constructed strategic SuDS Feature A.

5.11 *Drawing 10413-SEG3-360 T1 (DRAINAGE LAYOUT SHEET 4 OF 6 "THE AVENUE NORTHERN SECTION")*[17] and the *Drainage Calculations Northern approved as part of the discharge of condition application DC/23/94783* shows two connection points with capacity to convey surface water runoff from 1.585 Ha of Development Catchment Area E to 'The Avenue' link road drainage network, prior to discharge to the recently constructed strategic SuDS Feature E.

5.12 With regards to the proportion of Catchment Area E to the west of 'The Avenue' link road, a connection point to 'The Avenue' link road drainage network is not shown in the aforementioned drawings or calculations. However, a review of the catchment area in the *MicroDrainage Source Control Calculations for Basin E in the approved Flood Risk Assessment prepared by PFA Consulting*[18] (2.755 Ha), versus the two connection points with capacity to convey surface water runoff from 1.585 Ha of Development Catchment Area E to 'The Avenue' link road drainage network, indicates the recently constructed strategic SuDS Feature E has capacity for 1.17 Ha from the proportion of Catchment Area E to the west of 'The Avenue' link road.

5.13 Please see **Table 2.1** below highlighting the proposed changes to Development Catchment Areas A and E from the approved Flood Risk Assessment. Please see **Table 2.2** below highlighting the proposed changes to the water depths in the recently constructed strategic SuDS Features A and E Flow Control Manholes from what was originally proposed in the *approved Flood Risk Assessment prepared by PFA Consulting*[19].

Table 2.1 - Summary highlighting proposed changes to Development Catchment Areas A and E from what was originally proposed in the approved Flood Risk Assessment

Dev Catchment Area	Impermeable Area in MicroDrainage Source Control Calculations at Outline Planning (Ha)	Connection Point Catchment Areas (Ha) in Drainage Calculations Northern Section at Discharge of Condition Application DC/23/94783	Impermeable Area at Reserved Matters (Ha) Including 10% Urban Creep
A	1.584	1.314	1.745
E	2.755	2.755*	2.864

- Includes 1.17 Ha from the proportion of Catchment Area E located to the west of 'The Avenue' link road

[15] *Rueby & Stagg Ltd, Drawing 10413-SEG3-361 T1 (DRAINAGE LAYOUT SHEET 5 OF 6 "THE AVENUE NORTHERN SECTION"), Dated 06/10/22*
[16] *Rueby & Stagg Ltd, Drawing 10413-SEG3-361 T1 (DRAINAGE LAYOUT SHEET 5 OF 6 "THE AVENUE NORTHERN SECTION"), Dated 06/10/22*
[17] *Rueby & Stagg Ltd, Drawing 10413-SEG3-360 T1 (DRAINAGE LAYOUT SHEET 4 OF 6 "THE AVENUE NORTHERN SECTION"), Dated 06/10/22*
[18] *PFA Consulting, Flood Risk Assessment, Job No G277, Issue 2, Dated 27.05.2021*
[19] *PFA Consulting, Flood Risk Assessment, Job No G277, Issue 2, Dated 27.05.2021*

Table 2.2 - Water depth modelled within recently constructed strategic SuDS Ponds A and E Flow Control Manholes at the Outline Planning, Discharge of Condition Application DC/23/94783 and Reserved Matters stages

Strategic SuDS Pond	Water depth modelled within new strategic SuDS Ponds A and E at the Outline Planning Stage (m)	Water depth modelled within new strategic SuDS Ponds A and E at Discharge of Condition Application DC/23/94783 (m)	Water depth modelled within new strategic SuDS Ponds A and E at the Reserved Matters stage (m) Including 10% Urban Creep	Water depth modelled within new strategic SuDS Ponds A and E at the Reserved Matters stage (m) using the 1 in 100 + 45% critical rainfall event and updated FEH 2022 point data
A	0.861 (Modelled based on 1.2m deep Pond and Flow Control Manhole)	0.935 (Modelled based on 1.2m deep Pond and Flow Control Manhole)	1.022 (Modelled based on recently constructed 1.208m deep Pond and Flow Control Manhole)	1.055 (Modelled based on recently constructed 1.208m deep Pond and Flow Control Manhole)
E	0.737 (Modelled based on 1.2m deep Pond and Flow Control Manhole)	0.558* (Modelled based on 1.2m deep Pond and 1.1m deep Flow Control Manhole)	0.823 (Modelled based on recently constructed 1.2m deep Pond and 1.098m deep Flow Control Manhole)	0.854 (Modelled based on recently constructed 1.2m deep Pond and 1.098m deep Flow Control Manhole)

- Based on 1.645 Ha catchment area in model

d) Updated drainage plans and calculations as appropriate to include type, layout and dimensions of drainage features including references to link to the drainage calculations.

5.14 *Motion drawing number 2103078-0501-P04 [Drainage Strategy]* is included in **Appendix C**.

5.15 The impermeable area associated with the resurfacing of the existing Fir Tree Lane to the east of 'The Avenue' link road has been included in the InfoDrainage model in **Appendix D** as draining to Existing Strategic SuDS Feature A; however, the exact details of how the existing Fir Tree Lane will drain to Strategic SuDS Feature A will be subject to a cctv survey of the existing surface water drainage system. Please see the Topographical Survey in **Appendix A** for the existing gully locations.

5.16 Hydraulic calculations for the 1 in 2, 1 in 30 + 30% and 1 in 100 + 40% critical rainfall events using the FEH 2013 point data modelled at the outline planning and discharge of condition application DC/23/94783 stages, **and including a 10% allowance for Urban Creep**, are included in **Appendix D**.

5.17 Sensitivity tests results for the 1 in 2, 1 in 30 + 40% and 1 in 100 + 45% critical rainfall events[20] using updated FEH 2022 point data, **and including a 10% allowance for Urban Creep**, are also included in **Appendix D**.

5.18 Where the Site is modelled to drain to Strategic SuDS Features A and E via 'The Avenue' link road drainage network, the hydraulic calculations use the same manhole and headwall locations, cover levels, invert levels and pipe slopes as the *Drainage Calculations Northern Section approved as part of the discharge of condition application DC/23/94783*. Please see Sections 5.10 and 5.11 above.

Development Catchment A

5.19 For Development Catchment Area A, the InfoDrainage model pdf output for the 1 in 2, 1 in 30 + 30% and 1 in 100 + 40% critical rainfall events using the FEH 2013 point data show no surcharge for the 1 in 2 year critical event; no flooding for the 1 in 30 + 30% critical event; and negligible flooding at a single manhole for the 1 in 100 + 40% critical event.

[20] https://environment.data.gov.uk/hydrology/climate-change-allowances/rainfall

5.20 The InfoDrainage model pdf output for the 1 in 30 + 40% and 1 in 100 + 45% critical rainfall events using updated FEH 2022 point data is similar to above, with negligible flooding at three manholes for the 1 in 100 + 45% critical event.

Development Catchment E

5.21 For Development Catchment Area E, the InfoDrainage model pdf output for the 1 in 2, 1 in 30 + 30% and 1 in 100 + 40% critical rainfall events using the FEH 2013 point data show no surcharge for the 1 in 2 year critical event; no flooding for the 1 in 30 + 30% critical event; and negligible flooding for nine manholes for the 1 in 100 + 40% critical event (maximum flooded volume 11.59m^3 from manhole S69).

5.22 The InfoDrainage model pdf output for the 1 in 30 + 40% and 1 in 100 + 45% critical rainfall events[21] using updated FEH 2022 point data is similar to above, with negligible flooding at three manholes for the 1 in 30 + 40% critical event (maximum flooded volume 1.625m^3 from manhole S69), and negligible flooding at eleven manholes for the 1 in 100 + 45% critical event (maximum flooded volume 13.771m^3 from manhole S69).

5.23 All the manholes that show flooding for the 1 in 30 + 40% critical event; and seven of the manholes that show negligible flooding for the 1 in 100 + 45% critical event relate to a network draining to a connection point indicated to have capacity to convey surface water runoff from 0.275 Ha of Development Catchment Area E to 'The Avenue' link road drainage network. The actual catchment area including 10% urban creep draining to this connection point in the InfoDrainage model is 0.52 Ha. However, it is important to note that 'The Avenue' link road drainage network does not show any flooding in the InfoDrainage model. Also, approximately 11% (575m^2) of the 0.52 Ha catchment area will be pervious pavement post development, providing around 50m^3 of long term storage that has not been included in the InfoDrainage model.

5.24 The impermeable area associated with the resurfacing of the existing Fir Tree Lane is included in the InfoDrainage model as draining to Existing Strategic SuDS Feature A. Please see Section 5.15 above.

e) Cross and long sections of proposed basins to include exceedance flow paths in the event of flow control blockage between basins I & J

5.25 *The Odyssey Flood Risk Assessment and Drainage Strategy - Addendum 1*[22] submitted for Eastleigh Borough Council outline planning application Ref O/20/89498 clarifies that this element of condition 61 relates to another area of the One Horton Heath development draining to Basin I, Basin J, Basin K and Basin L.

f) Details of protection measures to minimise blockage risk to flow control devices

5.26 *The Odyssey Flood Risk Assessment and Drainage Strategy - Addendum 1*[23] submitted for Eastleigh Borough Council outline planning application Ref O/20/89498 clarifies that this element of condition 61 relates to another area of the One Horton Heath development draining to Basin I, Basin J, Basin K and Basin L.

g) Evidence that urban creep has been included within the calculations

5.27 Hydraulic calculations including 10% urban creep are included in **Appendix D**.

[21] https://environment.data.gov.uk/hydrology/climate-change-allowances/rainfall
[22] *Odyssey, Flood Risk Assessment and Drainage Strategy - Addendum 1, Job No 19-367, Dated May 2021*
[23] *Odyssey, Flood Risk Assessment and Drainage Strategy - Addendum 1, Job No 19-367, Dated May 2021*

h) Updated exceedance plans demonstrating the extent of flooding expected at the 1:100 + climate change event. These must also detail how flows are likely to behave at the apparent low spots where no onward flow path is identified

5.28 *Motion drawing number 2103078-0501-P04 [Drainage Strategy]* in **Appendix C** includes the extent of flooding expected for the 1:100 + 45% climate change 15 minute winter event in Development Catchment E (on the basis this is the critical event in the hydraulic calculations in **Appendix D** for ten of the eleven manholes modelled to flood in Section 5.22). A 50mm threshold has been used to remove areas where flooding is too shallow to be of note for the purposes of assessing flood risk to a development.

5.29 *Motion drawing number 2103078-0501-P04 [Drainage Strategy]* in **Appendix C** shows one of the two areas where flood water from the proposed surface water drainage system in Development Catchment E collects is a low point in 'The Avenue' link road, where double road gullies are present that drain to Strategic SuDS Feature A. The other area where flood water from the proposed surface water drainage system in Development Catchment E collects is a location where pervious parking spaces are proposed for Plots 242 and 243.

5.30 *Motion drawing number 2103078-0501-P04 [Drainage Strategy]* in **Appendix C** also includes flow paths in the event of blockages or storms exceeding design criteria**.** The flow arrows show the onward flow paths if the two areas where flood water from the proposed surface water drainage system in Development Catchment E collects reaches a certain level. In both cases flows will be away from proposed dwellings towards soft landscaped areas.

5.31 Areas of proposed hardstanding will be designed to comply with building regulations and divert water away from the proposed buildings and a minimum of 300mm freeboard will be provided between the design event water levels in the low points of the proposed surface water drainage systems and the finished ground floor levels.

5.32 As stated in Section 5.5 above, with reference to the proposed exceedance flow routes in the Drainage Strategy in **Appendix C,** it is possible for the majority of the low traffic roads to drain to the proposed surface water drainage network either via Unlined Type C No Infiltration Pervious Pavements [300mm 4/40 coarse graded aggregate to BS EN 7533-13 subbase with 30% void ratio] with collector pipe(s); Bioretention Areas with underdrains; or the existing Road Swale (where the new road junction from Development Catchment Area A is proposed post development).

i) Details of land drainage provision to allow suitable drainage of green areas where overland flow routes are disrupted as a result of the development

5.33 A section of an existing ordinary watercourse will need to be culverted as part of the Development of Catchment Area A, and the existing ordinary watercourse catchment is shown in the Drainage Strategy in **Appendix C**.

5.34 Please see **Appendix E** for:

- The calculated hydraulic capacity of the existing ditch and the rationale for the proposed 600mm diameter culvert.
- Confirmation from Eastleigh Borough Council that they are happy with the space available for the proposed culvert between Block A and Block B.
- How Development Catchment Area A will ensure soft landscaped areas in the ordinary watercourse catchment area can continue to drain to the proposed culverted section of the ordinary watercourse post development e.g. SuDS that drain to the culvert rather than the Strategic SuDS**.**

5.35 The culvert proposal is indicative for planning, and full details will be provided when the application for ordinary watercourse consent is submitted after reserved matters permission is granted.

5.36 With regards to the proposal to construct two houses in the location of the existing shallow ditch in the location of Plots 87 and 88, this will have nil detriment in terms of water management and biodiversity as the shallow ditch previously drained an area comprising of impermeable road; parking area and hardstanding area which will be removed as part of the development.

j) Confirmation that the SuDS infrastructure is in place or will be in place prior to the development of the related plot

5.37 With reference to Sections 5.8 to 5.12 above, Strategic SuDS Features A and E have been constructed, and hydraulic modelling has been undertaken at the outline planning and discharge of condition application DC/23/94783 stages to ensure the Site has appropriately sized strategic SuDS to drain to. In the *Drainage Calculations Northern Section approved as part of the discharge of condition application DC/23/94783*, the volumes of Strategic SuDS Features A and E were 1271 and 2724m^3 respectively. A review of the as-built drawing provided by Eastleigh Borough Council included in *Motion drawing number 2103078-0501-P04 [Drainage Strategy]* using Site3D Civil Engineering Design Software indicates the as-built volumes of Strategic SuDS Features A and E are 1227 and 2580m^3 respectively.

5.38 The *PFA Consulting Flood Risk Assessment Addendum*[24] for Eastleigh Borough Council outline planning application Ref O/20/89498 states 'It is proposed that surface water runoff from all development areas on the site will be treated by a SuDS Management Train consisting of source control techniques, strategic SuDS features and mechanical separators' and 'In addition to the upstream source control measures, runoff from all development areas on the site will pass through at least one Strategic SuDS Feature'.

5.39 With reference to the Drainage Strategy in **Appendix C**, the 4805m^2 area of proposed pervious pavements will represent the 'Source Control' element of the SuDS 'management train'.

5.40 The *PFA Consulting Flood Risk Assessment Addendum*[25] for Eastleigh Borough Council outline planning application Ref O/20/89498 clarifies that strategic SuDS Ponds A and E represent the 'Regional Control' element of the SuDS 'management train'.

5.41 *Drawing 10413-SEG3-359 T1 (DRAINAGE LAYOUT SHEET 3 OF 6 "THE AVENUE NORTHERN SECTION")*[26]; *Drawing 10413-SEG3-361 T1 (DRAINAGE LAYOUT SHEET 5 OF 6 "THE AVENUE NORTHERN SECTION")*[27]; and the as-built drawing provided by Eastleigh Borough Council included in *Motion drawing number 2103078-0501-P04 [Drainage Strategy]* show mechanical separators downstream of the Flow Control Manholes.

5.42 With reference to the proposed exceedance flow routes in the Drainage Strategy in **Appendix C,** it is possible for the majority of the low traffic roads to drain to the proposed surface water drainage network either via Unlined Type C No Infiltration Pervious Pavements [300mm 4/40 coarse graded aggregate to BS EN 7533-13 subbase with 30% void ratio] with collector pipe(s); Bioretention Areas with underdrains; or the existing Road Swale (where the new road junction from Development Catchment Area A is proposed post development).

5.43 Unlined pervious pavements are possible as the Geo-Environmental Ground Investigation Report[28] submitted for the reserved matters application shows that low permeability CLAY overlies SAND (where present), and the only trial pits that recorded groundwater within 1m of the ground surface are TP02 ('Water seepage from surface'), TP04 (0.60, 0.90 and 1.30m – 'Water Seepages'), TP07 (0.60 and 1.60m

[24] *PFA Consulting, Flood Risk Assessment Addendum (O/20/89498), Job No G277-FN14, Dated June 2022*
[25] *PFA Consulting, Flood Risk Assessment Addendum (O/20/89498), Job No G277-FN14, Dated June 2022*
[26] *Rueby & Stagg Ltd, Drawing 10413-SEG3-359 T1 (DRAINAGE LAYOUT SHEET 3 OF 6 "THE AVENUE NORTHERN SECTION"), Dated 06/10/22*
[27] *Rueby & Stagg Ltd, Drawing 10413-SEG3-361 T1 (DRAINAGE LAYOUT SHEET 5 OF 6 "THE AVENUE NORTHERN SECTION"), Dated 06/10/22*
[28] *Geo-Environmental, Ground Investigation Report, Referenced GE19906-GIRv2.0-MAR22, Version 2.0, Dated 02/03/2022*

– 'Water ingress from land drain and seepage through side wall') and TP19 (0.80m – 'Water ingress and running sands. Pit instability at 2.80m bgl'). TP02 and TP04 are both located close to the northern Site boundary and indicate waterlogging of surface soils most likely as the result of water being perched above the CLAY stratum. The TP07 excavation encountered a land drain. TP19 is where the SAND stratum was encountered at its shallowest depth during the ground investigation. The ground level will be raised by a minimum of 0.30m in the location of TP19 post development, providing approximately 1m cover above the SAND stratum.

k) Confirmation that sufficient water quality measures have been included to satisfy the methodology in the Ciria SuDS Manual C753

5.44 The NPPF states that the development should not have a detrimental impact on the environment, including the water environment. The technical guidance to the NPPF provides further advice on the benefits of ensuring runoff quality is to an appropriate standard.

5.45 The CIRIA SuDS Manual provides guidance on the treatment of surface water runoff. With regards to the proposed development, Table 4.3 of the CIRIA SuDS Manual rates the pollution hazard from roof water runoff as 'very low'. The only requirement for roof water runoff is the removal of gross solids and sediments, which would be achieved using catchpits and silt traps upstream of the pervious pavements and open SuDS.

5.46 With regards to the low traffic roads, Table 4.3 of the CIRIA SuDS Manual rates the pollution hazard from low traffic roads as 'low'. To mitigate a 'low' pollution hazard, the CIRIA SuDS Manual recommends using a simple index approach in line with Section 26.7.1. This is discussed, below.

5.47 Table 26.2 of the CIRIA SuDS Manual provides pollution hazard indices for different land use classifications. The land use classification that requires consideration for the roads, streets and parking on the Site is in Table 2.1 below.

Table 2.1: Excerpt from Table 26.2 of CIRIA SuDS Manual

Land Use	Pollution Hazard Level	Total Suspended Solids (TSS)	Metals	Hydro-Carbons
Individual property driveways, residential car parks, low traffic roads (e.g. cul-de-sacs, homezones and general access roads) with less than 300 traffic movements per day.	Low	0.5	0.4	0.4

5.48 To deliver adequate pollution treatment and mitigation, the CIRIA SuDS Manual recommends using a SuDS component that has a total pollution mitigation index (for each contaminant type) that equals or exceeds the pollution hazard index (for each contaminant type).

5.49 Table 26.3 of the CIRIA SuDS Manual provides indicative SuDS mitigation indices for each SuDS type when discharging to surface water. Table 2.2, below, which is an excerpt from Table 26.3, shows the mitigation index for a Wetland (on the basis the *PFA Consulting Flood Risk Assessment Addendum*[29] states 'The Strategic SuDS Features will incorporate the following treatment processes as a minimum: -

- Sediment forebays at inlets.
- Extensive wetland areas incorporating micro pools.

[29] *PFA Consulting, Flood Risk Assessment Addendum (O/20/89498), Job No G277-FN14, Dated June 2022*

- Wetland planting.
- Secondary sedimentation areas prior to outlets.')

Table 2.2: Pollution Mitigation Indices for a Wetland

Type of pollution removal component	Total Suspended Solids (TSS)	Metals	Hydro-Carbons
Wetland	0.8[30]	0.8	0.8

5.50 The mitigation indices for a Wetland meet or exceed those of the highest pollution hazard index figures from Table 2.1.

l) Sustainable drainage elements with attenuation, storage and treatment capacities incorporated as set out in the CRIA SuDS Manual C697 CIRIA SuDS Manual C753, or equivalent and updated local or national design guidance where available. If SuDS are proposed as part of the open space provision on a site, gradients should generally not exceed 1:4

5.51 Table 2.1 shows the proposed the Development Impermeable Catchment Areas A and E are in line with what was originally proposed in the *approved Flood Risk Assessment prepared by PFA Consulting*[31].

5.52 Including 10% urban creep, the additional proposed Impermeable Area at Reserved Matters is 0.161 Ha in Development Catchment A in comparison to the Impermeable Area in MicroDrainage Source Control Calculations at Outline Planning.

5.53 Including 10% urban creep, the additional proposed Impermeable Area at Reserved Matters is 0.109 Ha in Development Catchment E in comparison to the Impermeable Area in MicroDrainage Source Control Calculations at Outline Planning.

5.54 All the shared access parking area surfaces will be constructed as pervious pavements. This 0.48 Ha area of proposed pervious pavements will provide around 430m³ additional long term storage that has not been included in the InfoDrainage model.

5.55 The proposed onsite swales will have 1 in 4 side slopes.

m) Details for the long-term maintenance, management, adoption and monitoring arrangements for the surface water drainage system. The submitted details shall include;

i) Maintenance schedules for each drainage feature type

ii) A plan detailing ownership of each drainage feature

iii) Confirmation that adoption of features is accepted by Southern Water/Highways Authority/other public body

iv) Details of protection measures

[30] Ponds and wetlands can remove coarse sediments, but their use for this purpose will have significant implications with respect to the maintenance requirements and amenity value of the system. Sediment should normally be removed upstream, unless they are specifically designed to retain sediment in a separate part of the component, where it cannot easily migrate to the main body of water.
[31] *PFA Consulting, Flood Risk Assessment, Job No G277, Issue 2, Dated 27.05.2021*

v) Specify the responsibilities of each party for the implementation of the SuDS scheme.

vi) Specify a timetable for implementation.

5.56 *Motions Drainage Management and Maintenance Plan*[32] has been submitted for the reserved matters application.

5.57 The Legend in *Motion drawing number 2103078-0501-P04 [Drainage Strategy]* in **Appendix C** includes ownership of each drainage feature.

[32] *Motion, Drainage Management and Maintenance Plan, Referenced 1eaquo/2103078, Dated 22/10/2025*

6.0 Additional Flood Risk Assessment

Flooding from Rivers and the Sea

6.1 Please see *Motion drawing number 2103078-0501-P04 [Drainage Strategy]* in **Appendix C** showing the River Flood Zone Extents based on the undefended Flood Zone 2 and 3 Datasets including a 'Central' climate change allowance for the 2080s epoch (2070-2125) available to download from the *Defra Data Services Platform*[33].

6.2 It is concluded that the Site – including the proposed Northern Pumping Station, recently constructed Strategic SuDS Features A and E and 'The Avenue' link road drainage network via which the Site connects to the Strategic SuDS - is in Flood Zone 1. The proposed use of the Site is classified as 'More vulnerable' Development under the NPPF and is appropriate in Flood Zone 1. Therefore, the Development is appropriately located.

Surface Water Flooding

6.3 With reference to the Risk of Flooding from Surface Water (RoFSW) Extent and Depth Maps in **Appendix F**, the Site is predominantly located in the Very Low surface water flood risk category (less than 1 in 1000 chance of flooding each year).

6.4 There are linear areas of Low, Medium and High risk of surface water flooding (i.e. between 1 in 1000 and 1 in 100, between 1 in 100 and 1 in 30 and more than 1 in 30 chance of flooding in any given year respectively) along the route of:

- Fir Tree Lane;
- the existing ordinary watercourse that will in part need to be culverted post development; and,
- the existing shallow ditch in the location of Plots 87 and 88.

6.5 With reference to Sections 5.15 and 5.33 to 5.36, as the proposed development will convey and discharge surface water generated in line with appropriate guidance, there will be a Low risk of surface water flooding to the proposed development on Site, and no increased risk of surface water flooding off Site.

Groundwater Flooding

6.6 The *Geo-Environmental Ground Investigation Report*[34] submitted for the reserved matters application states the following:

'The groundwater encountered during the intrusive investigate works are assumed to be perched water trapped within the more granular layers of the Wittering Formation. It is possible that groundwater could be present at differing depths over time, e.g. during or following prolonged wet periods. The presence of groundwater in excavations could influence suitability and buildability of foundations, services and the like. This may mean that conventional foundations are not constructible under some conditions, such as during winter months and following heavy rainfall, or other similar scenarios where water is present. This will require careful consideration throughout the design and construction process.'

6.7 With reference to above and Section 5.43, as the proposed development including the Source Control SuDS will take account of the perched groundwater in line with appropriate guidance, there will be a Low risk of groundwater flooding to the proposed development on Site, and no increased risk of groundwater flooding off Site.

[33] https://environment.data.gov.uk/dataset/610d6830-0637-4f5b-b6ce-61f5fa5635d3
[34] *Geo-Environmental, Ground Investigation Report, Referenced GE19906-GIRv2.0-MAR22, Version 2.0, Dated 02/03/2022*

Flooding from Infrastructure Failure

6.8 Sewer flooding can occur when the capacity of the infrastructure is exceeded by excessive flows, or because of a reduction in capacity due to collapse, siltation, blockage, or if the downstream system becomes surcharged. This can lead to the sewers flooding onto the surrounding ground via manholes and gullies, which can generate overland flows.

6.9 With reference to the preceding sections, as the surface water sewer system including the Strategic and Source Control SuDS will be constructed to convey and accommodate the 100-year + 45% critical rainfall event including a 10% allowance for Urban Creep, and maintained for the lifetime of the development, it is concluded that the proposed Development is at low risk of flooding from surface water infrastructure failure.

6.10 Similarly, with reference to Section 3.0 above, as the foul water sewer system including the Strategic Northern Pumping Station will be constructed to convey and accommodate foul water to an adoptable standard, and maintained for the lifetime of the development, it is concluded that the proposed Development is at low risk of flooding from foul water infrastructure failure.

Flooding from Artificial sources

6.11 There are no canals in the Site area to create flood risk.

6.12 The Site is also not in an area at risk of reservoir flooding according to the EA Maximum extent of flooding from reservoirs map (**Appendix F**).

6.13 It is concluded, based on above, that the proposed Development - including the proposed Northern Pumping Station, recently constructed Strategic SuDS Features A and E and 'The Avenue' link road drainage network via which the Site connects to the Strategic SuDS - is not in an area at risk of reservoir flooding.

7.0 Surface Water Drainage Strategy

7.1 The drainage strategy drawings and hydraulic calculations included in **Appendix C** and **Appendix D** represent a more detailed assessment of the required Surface Drainage and Source Control SuDS, with reference to the proposed Site levels.

7.2 Areas of proposed hardstanding will be designed to comply with building regulations and divert water away from the proposed buildings and a minimum of 300mm freeboard will be provided between the design event water levels in the low points of the proposed surface water drainage systems and the finished ground floor levels.

7.3 All the shared access parking area surfaces will be constructed as pervious pavements. The Interpave document Guide to the Design, Construction and Maintenance of Concrete Block Permeable Pavements edition 6 states 'Concrete block permeable pavements reduce the volume of rainfall that flows out from them significantly and the time it takes for the water to flow out is much longer than for conventional drainage systems. Studies reported in CIRIA report C 582 (CIRIA, 2001) have shown that some 11% to 45% of rainfall flows out from the pavement during a rainfall event. Subsequently over the 2 to 4 days after an event, more water flows out to give a total outfall of between 55% and 100%'. On this basis, it is concluded that the long-term storage volumes provided by the 0.48ha area of proposed pervious pavements are likely to be more than what is indicated by the half drain times in the hydraulic calculations, and volumetric runoff coefficients of 0.75 and 0.84 for the summer and winter scenarios have been used in the model to more accurately reflect this.

7.4 The top surface of the pervious pavement should finish at least 150mm below any adjoining DPC level. Advice should always be sought from the manufacturer.

7.5 Gullys and linear drainage channels are required to convey surface water for up to the 100 year + 45% climate change critical flow rate. Construction details and supporting calculations are to be provided at the detailed design stage.

7.6 Construction details for the Source Control SuDS are to be provided at the detailed design stage.

7.7 The impermeable area associated with the resurfacing of the existing Fir Tree Lane to the east of 'The Avenue' link road has been included in the InfoDrainage model in **Appendix D** as draining to Existing Strategic SuDS Feature A; however, the exact details of how the existing Fir Tree Lane will drain to Strategic SuDS Feature A will be subject to a cctv survey of the existing surface water drainage system. Please see the Topographical Survey in **Appendix A** for the existing gully locations.

7.8 The culvert proposal is indicative for planning, and full details will be provided when the application for ordinary watercourse consent is submitted after reserved matters permission is granted.

7.9 Sensitivity tests results for the 1 in 100 + 45% critical rainfall event using updated FEH 2022 point data **and a 10% allowance for urban creep** in **Appendix D** indicate 0.153m and 0.244m freeboard in the recently constructed Strategic SuDS Features A and E post development, and negligible flooding in Development Catchment Areas A and E.

7.10 The Source Control SuDS have been located to integrate with and not compromise the function of the natural drainage systems and will also receive exceedance flows.

7.11 Whilst the drainage strategy for the Site has been designed to current standards, there would remain a small residual risk of flooding due to blockage or failure of on-site infrastructure in the future. Therefore, appropriate and regular maintenance of the drainage infrastructure should be undertaken.

7.12 To assist with this process, *Motions Drainage Management and Maintenance Plan*[35] has been submitted for the reserved matters application, which sets out the principles for the long-term management and maintenance of the proposed surface water drainage system on the development. The purpose of this document is to ensure that those responsible for Site maintenance have a robust inspection and maintenance plan going forwards. This will help ensure the optimum operation of the surface water drainage system and that it will be regularly maintained for the lifetime of the development. This will contribute to reducing the risk of surface water flooding both on and off-site.

7.13 The LLFA has been engaged during the pre-application process, and this information is included in **Appendix G**.

[35] *Motion, Drainage Management and Maintenance Plan, Referenced 1eaquo/2103078, Dated 22/10/2025*

8.0 Conclusions

8.1 This Drainage Strategy presents information for a Reserved Matters Planning Application following the Outline Approval (ref: P/20/1168/OA).

8.2 Notwithstanding that areas of proposed hardstanding will be designed to comply with building regulations and divert water away from the proposed buildings, it is a requirement of the strategy that Site levels integrate with and not compromise the function of the natural drainage systems; 0.48ha of hard landscaping areas will be constructed as pervious; and the overall SuDS system will have capacity that can accommodate rainfall for the 100 year + 45% allowance for climate change critical event with negligible flooding.

8.3 The drainage strategy will use pervious pavements and the recently constructed Strategic SuDS Features A and E for the attenuation of surface water runoff from the development. Flow control chambers to control discharge from the recently constructed strategic SuDS Ponds A and E are already installed.

8.4 The results of the hydraulic modelling show that the drainage strategy can attenuate and discharge surface water generated in the 1 in 100-year + 45% cc critical rainfall event with a 10% allowance for urban creep with negligible flooding in Development Catchment Areas A and E. This manages flood risk on and off-site and reduces overall local flood risk.

8.5 The proposed surface water drainage strategy is also able to mitigate all pollution hazards created on site using SuDS features and no further pollution mitigation is needed.

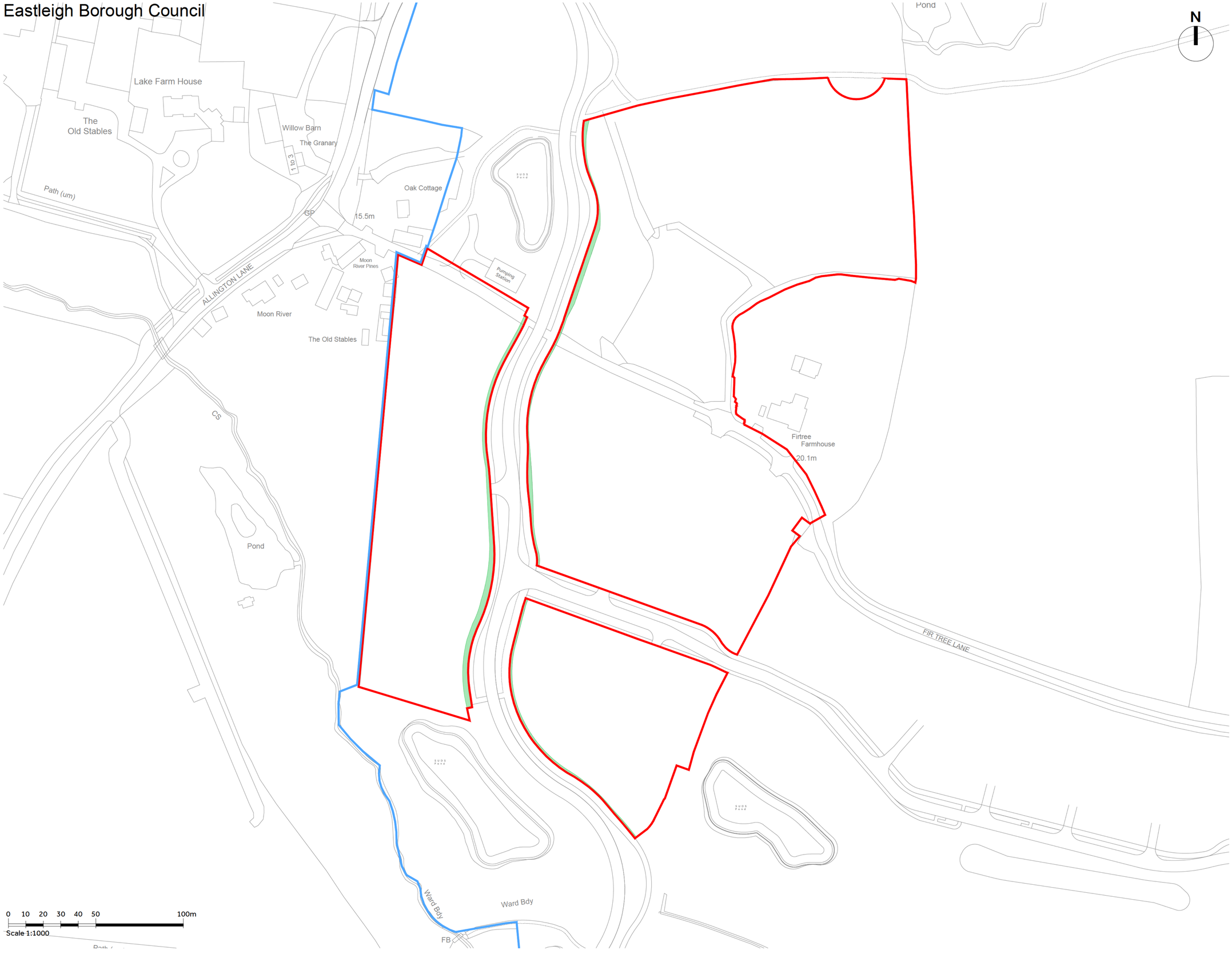
8.6 Residual risk has been addressed through the development of a drainage management and maintenance plan that provides a framework through which the Site's drainage system should be managed in perpetuity.

8.7 In conclusion, this report presents information about the Drainage Strategy for a reserved matters application for Development Catchment Areas A and E. The strategy has been demonstrated to meet the requirements of the Flood Risk Assessment approved as part of the outline planning permission, the LLFA and NPPF.

Appendix A

Site Location Plan and Topgraphical Survey

Eastleigh Borough Council



One Horton Heath, Quobleigh Breach

N

NOTES:

Report all discrepancies, errors and omissions.

Verify all dimensions on site before commencing any work on site or preparing shop drawings.

All materials, components and workmanship are to comply with the relevant British Standards, Codes of Practice, and appropriate manufacturers recommendations that from time to time shall apply.

For all specialist work, see relevant drawings.

This drawing and design are copyright of Clague LLP
Registration number OC335948.

Rev	Date	Description

Key:

- Site Boundary (7.028ha)
- Overall Application Boundary
- Overlap with Road 3 Application

Project Title

Eastleigh Borough Council

Proposed Residential Development
One Horton Heath
Quobleigh Breach

Drawing Description

Site Location Plan

Scale	Drawn by
1:1000 at A1	HP
Date	Checked by
June 2025	TWM

CLAGUE ARCHITECTS

62 Burgate, Canterbury
Kent CT1 2BH 01227 762060

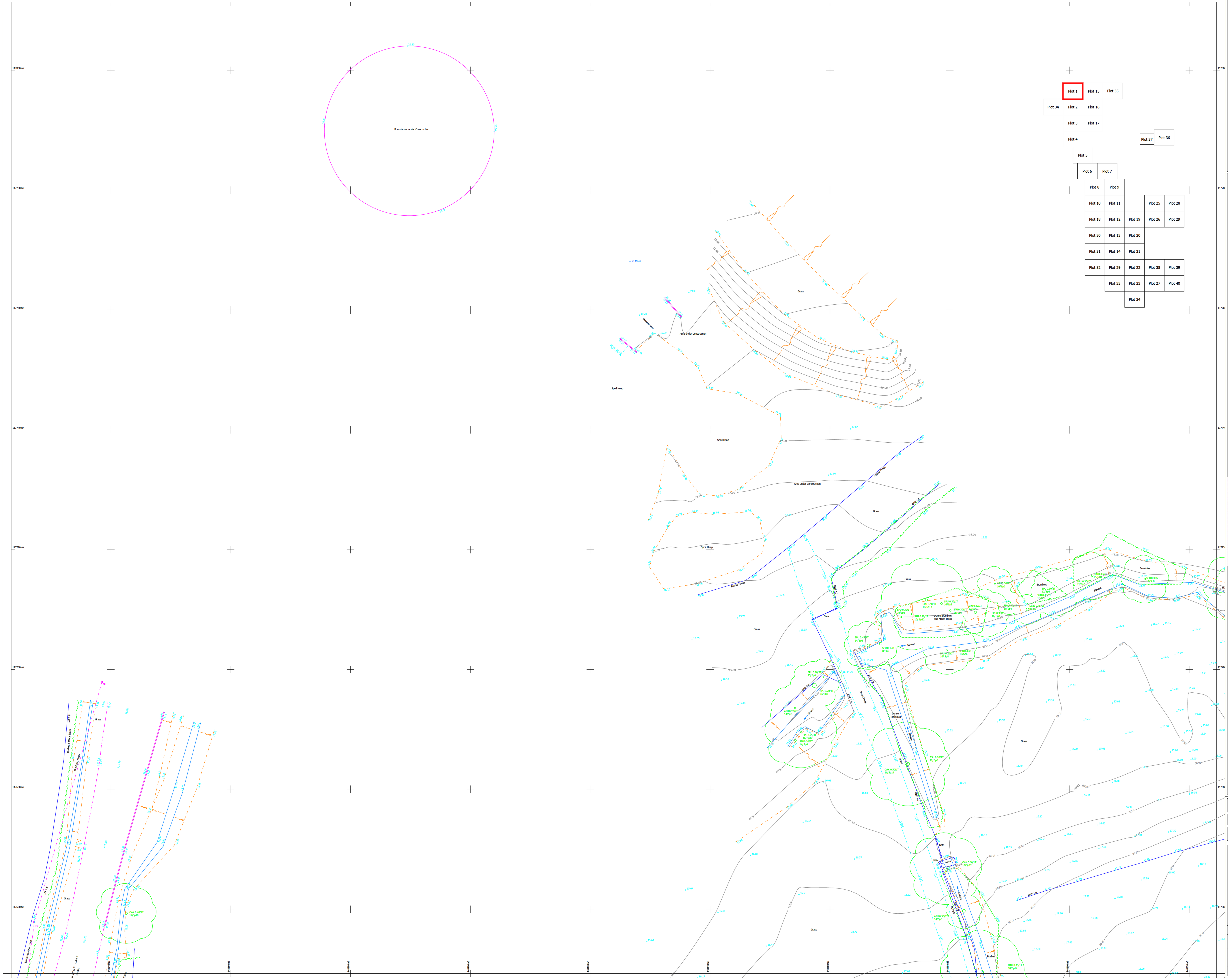
1 Kinsbourne Court, Luton Road,
Harpenden, Hertfordshire AL5 3BL 01582 765102

8, Disney Street
London SE1 1JF 0203 597 6112

CANTERBURY LONDON HARPENDEN

Project - Originator - Function - Spatial - Form - Discipline - Number. Revision

30071D - CLA - EXSL - 00 - PD - A - 0001 - P2



NOTES:

Drainage:
Inspection Covers are lifted where possible and all drainage invert information has been obtained through visual inspection only, with no entry into manholes. Therefore the complete accuracy cannot be guaranteed. Where drainage is of critical importance we suggest the services of a specialist drainage expert be used.

Trees:
Every effort has been made to identify and detail all trees on site but where trees are of critical importance we suggest the use of a specialist such as an arborist. Tree spread and heights are indicative.

GPS:
GPS detail is relative to the time and date of survey. GPS levels and grid are obtained using industry standard guidelines and can vary according to the quality of the GPS network at the time of survey. Unless stated otherwise, surveys are Scale factor 1 and Horizontal and Vertical Datums are established from a central site fix and baseline orientation station utilising GNSS correction data.

Survey notes:
Survey specification is linked to the original purpose of the survey commissioned at source and is to be used for this purpose only. Survey is accurate within limitations of site conditions at the time of survey. In areas difficult to survey due to restricted access, lines of sight or dense vegetation, critical dimensions and positions should be verified following suitable clearance.
Survey detail obtained and shown is relative to the plotting scale.

Copyright:
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LEGEND

TREE SPECIES INFORMATION

ALDER	ALD	LOCUST	LOC
ASH	ASH	LONDON PLANE	LPN
ASPEN	ASP	MAGNOLIA	MAG
BEECH	BCH	MAPLE	MPL
CEDAR	CED	OAK	OAK
CHERRY	CHY	PINE	PNE
CYPRESS	CYP	POPLAR	POP
ELM	ELM	PRUNUS	PNS
FIR	FIR	RHODODENDRONS	RDN
FRUIT	FRT	ROWAN	RWN
HAWTHORN	HAW	SILVER BIRCH	SIB
HAZEL	HAZ	SORBUS	SOR
HOLLY	HLY	SWEET CHESTNUT	SCH
HORSE CHESTNUT	HCH	SYCAMORE	SYC
HORNBEAM	HRM	WALNUT	WNT
LABURNUM	LRM	WILLOW	WLW
LARCH	LAR	YEW	YEW
LIME	LIM	SPECIES UNKNOWN	SPU
		COPPICED	COP

TREE ANNOTATIONS: Tree Species / Tree Boll Size / No of Bolls
Tree Height / Tree Canopy Spread

FENCE INFORMATION

BARBED WIRE FENCE	BWF
CORRUGATED IRON FENCE	CIF
CLOSE BOARD FENCE	CBF
CHAIN LINK FENCE	CLF
CHESTNUT PALING	CPF
CRASH BARRIER	CBR
HANDRAIL	HDL
IRON RAILINGS	IRF
LARCH LAP FENCE	LLF
MISCELLANEOUS FENCE	MSF
PALISADE FENCE	PSF
PICKET FENCE	PKF
POST AND CHAIN FENCE	PCF
POST AND RAIL FENCE	PRF
POST AND WIRE FENCE	PWF
STOCK WIRE FENCE	SWF
TRELLIS FENCING	TLF

LEVEL INFORMATION

BASEMENT LEVEL	BTL
BED LEVEL	BL
COVER LEVEL	CL
DAMP PROOF COURSE	DPC
FLOOR LEVEL	FL
INVERT LEVEL	IL
OUTFALL LEVEL	OL
THRESHOLD LEVEL	THL
FOUL WATER	FW
SURFACE WATER	SW
UNABLE TO LIFT	UTL
WATER LEVEL	WL

SURFACE INFORMATION

CONCRETE	Conc
BRICK PAVERS	BP
FLOWERBED	FB
PAVING SLABS	PS
RETAINING WALL	RWal
TACTILE PAVING	Tac

FEATURE INFORMATION

BOLLARD	BO	NOTICE BOARD	NB
BRITISH TELECOM BOX	BTB	POST	P
BRITISH TELECOM IC	BTIC	RAIN WATER PIPE	RWP
BUS STOP	BS	RAISED FLOWERBED	RFB
CABLE TELEVISION BOX	CATB	ROAD SIGN	RS
CABLE TELEVISION IC	CATV	RODDING EYE	RE
EARTHING ROD	ER	SERVICE MARKER POST	SMP
ELECTRICITY CABLE PIT	ELCP	SOIL VENT PIPE	SVP
ELECTRICITY CONTROL BOX	ECB	STOP COCK	SC
ELECTRICITY POLE	EP	STOP VALVE	SV
FIRE HYDRANT	FH	TELEGRAPH POLE	TP
INSPECTION COVER	IC	TELEPHONE CALL BOX	TCB
LAMP POST	LP	TRAFFIC SIGNAL	TS
LETTER BOX	LB	TRAFFIC SIGNALS IC	TSIC
LITTER BIN	BIN	WATER METER	WM
KERB OUTLET	KO	WATER TAP	Tap
NAME PLATE	NP		

ONE HORTON HEATH

Level Datum:
Levels are related to a previos survey Ref (IR SAV 1.21) supplied by the client

Grid:
Grid is related to a previous survey Ref (IR SAV 1 21)

Northpoint:

ENCOMPASS SURVEYS

Encompass Surveys Ltd
Unit 2
Talisman Business Centre
Duncan Road
Park Gate, Southampton
Hampshire SO31 7GA

Tel: 023 80692002
Fax: 023 80697125
Email: info@encompass-surveys.co.uk
Website: encompass-surveys.co.uk

Client:	Eastleigh Borough Council		
Survey Location:	Horton Heath, Hampshire, SO30 2PA		
Survey type:	Topographical	Scale:	1:200@A0
Drawing ref:	ENC/ONE-HH-FEB21	Date:	February 2021
Drawn/QA:	DH/GL	Plot No.	1 of 40

NOTES:

Drainage:
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Copyright:
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LEGEND

TREE SPECIES INFORMATION

ALDER	ALD	LOCUST	LOC
ASH	ASH	LONDON PLANE	LPN
ASPEN	ASP	MAGNOLIA	MAG
BEECH	BCH	MAPLE	MPL
CEDAR	CED	OAK	OAK
CHERRY	CHY	PINE	PNE
CYPRESS	CYP	POPLAR	POP
ELM	ELM	PRUNUS	PNS
FIR	FIR	RHODODENDRONS	RDN
FRUIT	FRT	ROWAN	RWN
HAWTHORN	HAW	SILVER BIRCH	SBI
HAZEL	HAZ	SORBUS	SOR
HOLLY	HLY	SWEET CHESTNUT	SCH
HORSE CHESTNUT	HCH	SYCAMORE	SYC
HORNBEAM	HRM	WALNUT	WNT
LABURNUM	LBM	WILLOW	WLW
LARCH	LAR	YEW	YEW
LIME	LIM	SPECIES UNKNOWN	SPU
		COPPICED	COP

TREE ANNOTATIONS: Tree Species / Tree Ball Size / No of Balls
Tree Height / Tree Canopy Spread

FENCE INFORMATION

BARBED WIRE FENCE	BWF
CORRUGATED IRON FENCE	CIF
CLOSE BOARD FENCE	CBF
CHAIN LINK FENCE	CLF
CHESTNUT PALING	CPF
CRASH BARRIER	CBR
HANDRAIL	HDL
IRON RAILINGS	IRF
LARCH LAP FENCE	LLF
MISCELLANEOUS FENCE	MSF
PALISADE FENCE	PSF
PICKET FENCE	PKF
POST AND CHAIN FENCE	PCF
POST AND RAIL FENCE	PRF
POST AND WIRE FENCE	PWF
STOCK WIRE FENCE	SWF
TRELLIS FENCING	TLF

LEVEL INFORMATION

BASEMENT LEVEL	BTL
BED LEVEL	BL
COVER LEVEL	CL
DAMP PROOF COURSE	DPC
FLOOR LEVEL	FL
INVERT LEVEL	IL
OUTFALL LEVEL	OL
THRESHOLD LEVEL	THL
FOUL WATER	FW
SURFACE WATER	SW
UNABLE TO LIFT	UTL
WATER LEVEL	WL

SURFACE INFORMATION

CONCRETE	Conc
BRICK PAVERS	BP
FLOWERBED	FB
PAVING SLABS	PS
RETAINING WALL	RWall
TACTILE PAVING	Tac

FEATURE INFORMATION

BOLLARD	BO	NOTICE BOARD	NB
BRITISH TELECOM BOX	BTBC	POST	P
BRITISH TELECOM IC	BTIC	RAIN WATER PIPE	RWP
BUS STOP	BS	RAISED FLOWERBED	RFB
CABLE TELEVISION BOX	CATB	ROAD SIGN	RS
CABLE TELEVISION IC	CATV	RODDING EYE	RE
EARTHING ROD	ER	SERVICE MARKER POST	SMP
ELECTRICITY CABLE PIT	ELCP	SOIL VENT PIPE	SVP
ELECTRICITY CONTROL BOX	ECB	STOP COCK	SC
ELECTRICITY POLE	EP	STOP VALVE	SV
FIRE HYDRANT	FH	TELEGRAPH POLE	TP
INSPECTION COVER	IC	TELEPHONE CALL BOX	TCB
LAMP POST	LP	TRAFFIC SIGNAL	TS
LETTER BOX	LB	TRAFFIC SIGNALS IC	TSIC
LITTER BIN	BIN	WATER METER	WM
KERB OUTLET	KO	WATER TAP	Tap
NAME PLATE	NP		

ONE HORTON HEATH

Level Datum:
Levels are related to a previos survey Ref (IR SAV 1.21) supplied by the client

Grid:
Grid is related to a previous survey Ref (IR SAV 1 21)

Northpoint:

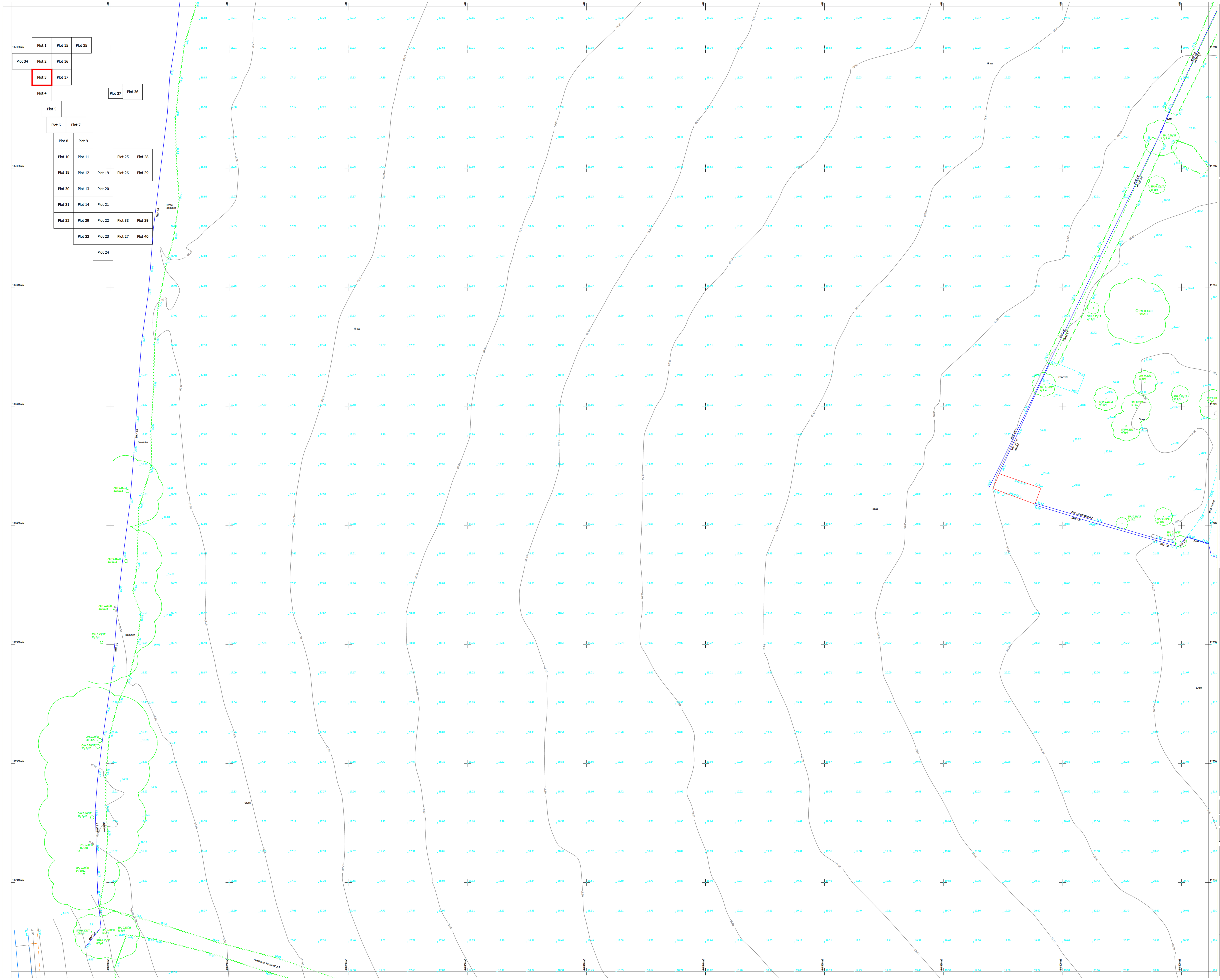
ENCOMPASS SURVEYS

Encompass Surveys Ltd
Unit 2
Talisman Business Centre
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Park Gate, Southampton
Hampshire SO31 7GA

Tel: 023 80692002 Email: info@encompass-surveys.co.uk
Fax: 023 80697125 Website: encompass-surveys.co.uk

Client:	Eastleigh Borough Council
Survey Location:	Horton Heath Hampshire SO30 2FA
Survey type:	Topographical — Scale: 1:200@A0
Drawing ref:	ENC/ONE-HH-FE021 — Date: February 2021
Drawn/QA:	DH/GL — Plot No. 2 of 40

Plot 1 Plot 15 Plot 35
Plot 34 Plot 2 Plot 16
Plot 3 Plot 17
Plot 4
Plot 5
Plot 6 Plot 7
Plot 8 Plot 9
Plot 10 Plot 11 Plot 25 Plot 28
Plot 18 Plot 12 Plot 19 Plot 26 Plot 29
Plot 30 Plot 13 Plot 20
Plot 31 Plot 14 Plot 21
Plot 32 Plot 29 Plot 22 Plot 38 Plot 39
Plot 33 Plot 23 Plot 27 Plot 40
Plot 24
Plot 37 Plot 36



NOTES:

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LEGEND

TREE SPECIES INFORMATION

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BEECH	BCH	MAPLE	MPL
CEDAR	CED	OAK	OAK
CHERRY	CHY	PINE	PNE
CYPRESS	CYP	POPLAR	POP
ELM	ELM	PRUNUS	PNS
FIR	FIR	RHODODENDRONS	RDN
FRUIT	FRT	ROWAN	RWN
HAWTHORN	HAW	SILVER BIRCH	SIB
HAZEL	HAZ	SORBUS	SOR
HOLLY	HLY	SWEET CHESTNUT	SCH
HORSE CHESTNUT	HCH	SYCAMORE	SYC
HORNBEAM	HRM	WALNUT	WNT
LABURNUM	LRM	WILLOW	WLW
LARCH	LAR	YEW	YEW
LIME	LIM	SPECIES UNKNOWN	SPU
		COPPICED	COP

TREE ANNOTATIONS: Tree Species / Tree Boll Size / No of Bolls
Tree Height / Tree Canopy Spread

FENCE INFORMATION

BARBED WIRE FENCE	BWF
CORRUGATED IRON FENCE	CIF
CLOSE BOARD FENCE	CBF
CHAIN LINK FENCE	CLF
CHESTNUT PALING	CPF
CRASH BARRIER	CBR
HANDRAIL	HDL
IRON RAILINGS	IRF
LARCH LAP FENCE	LLF
MISCELLANEOUS FENCE	MSF
PALISADE FENCE	PSF
PICKET FENCE	PKF
POST AND CHAIN FENCE	PCF
POST AND RAIL FENCE	PRF
POST AND WIRE FENCE	PWF
STOCK WIRE FENCE	SWF
TRELLIS FENCING	TLF

LEVEL INFORMATION

BASEMENT LEVEL	BTL
BED LEVEL	BL
COVER LEVEL	CL
DAMP PROOF COURSE	DPC
FLOOR LEVEL	FL
INVERT LEVEL	IL
OUTFALL LEVEL	OL
THRESHOLD LEVEL	THL
FOUL WATER	FW
SURFACE WATER	SW
UNABLE TO LIFT	UTL
WATER LEVEL	WL

SURFACE INFORMATION

CONCRETE	Conc
BRICK PAVERS	BP
FLOWERBED	FB
PAVING SLABS	PS
RETAINING WALL	RWal
TACTILE PAVING	Tac

FEATURE INFORMATION

BOLLARD	BO	NOTICE BOARD	NB
BRITISH TELECOM BOX	BTB	POST	P
BRITISH TELECOM IC	BTIC	RAIN WATER PIPE	RWP
BUS STOP	BS	RAISED FLOWERBED	RFB
CABLE TELEVISION BOX	CATB	ROAD SIGN	RS
CABLE TELEVISION IC	CATV	RODDING EYE	RE
EARTHING ROD	ER	SERVICE MARKER POST	SMP
ELECTRICITY CABLE PIT	ELCP	SOIL VENT PIPE	SVP
ELECTRICITY CONTROL BOX	ECB	STOP COCK	SC
ELECTRICITY POLE	EP	STOP VALVE	SV
FIRE HYDRANT	FH	TELEGRAPH POLE	TP
INSPECTION COVER	IC	TELEPHONE CALL BOX	TCB
LAMP POST	LP	TRAFFIC SIGNAL	TS
LETTER BOX	LB	TRAFFIC SIGNALS IC	TSIC
LITTER BIN	BIN	WATER METER	WM
KERB OUTLET	KO	WATER TAP	Tap
NAME PLATE	NP		

ONE HORTON HEATH

Level Datum:
Levels are related to a previos survey Ref (IR SAV 1.21) supplied by the client

Grid:
Grid is related to a previous survey Ref (IR SAV 1 21)

Northpoint:

ENCOMPASS SURVEYS

Encompass Surveys Ltd
Unit 2
Talisman Business Centre
Duncan Road
Park Gate, Southampton
Hampshire SO31 7GA

Tel: 023 80692002 Email: info@encompass-surveys.co.uk
Fax: 023 80697125 Website: encompass-surveys.co.uk

Client:	Eastleigh Borough Council		
Survey Location:	Horton Heath, Hampshire, SO30 2PA		
Survey type:	Topographical	Scale:	1:200@A0
Drawing ref:	ENC/ONE-HH-FEB21	Date:	February 2021
Drawn/QA:	DH/GL	Plot No.	3 of 40

NOTES:

Drainage:
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LEGEND

TREE SPECIES INFORMATION

ALDER	ALD	LOCUST	LOC		
ASH	ASH	LONDON PLANE	LPN		
ASPEN	ASP	MAGNOLIA	MAG		
BEECH	BCH	MAPLE	MPL		
CEDAR	CED	OAK	OAK		
CHERRY	CHY	PINE	PNE		
CYPRESS	CYP	POPLAR	POP		
ELM	ELM	PRUNUS	PNS		
FIR	FIR	RHODODENDRONS	RDN		
FRUIT	FRT	ROWAN	RWN		
HAWTHORN	HAW	SILVER BIRCH	SIB		
HAZEL	HAZ	SORBUS	SOR		
HOLLY	HLY	SWEET CHESTNUT	SCH		
HORSE CHESTNUT	HCH	SYCAMORE	SYC		
HORNBEAM	HRM	WALNUT	WNT		
LABURNUM	LBM	WILLOW	WLW		
LARCH	LAR	YEW	YEW		
LIME	LIM	SPECIES UNKNOWN	SPU		
		COPPICED	COP		

TREE ANNOTATIONS: Tree Species / Tree Ball Size / No of Balls
Tree Height / Tree Canopy Spread

FENCE INFORMATION

BARBED WIRE FENCE	BWF
CORRUGATED IRON FENCE	CIF
CLOSE BOARD FENCE	CBF
CHAIN LINK FENCE	CLF
CHESTNUT PALING	CPF
CRASH BARRIER	CBR
HANDRAIL	HDL
IRON RAILINGS	IRF
LARCH LAP FENCE	LLF
MESH/ILLANEOUS FENCE	MSF
PALISADE FENCE	PSF
PICKET FENCE	PKF
POST AND CHAIN FENCE	PCF
POST AND RAIL FENCE	PRF
POST AND WIRE FENCE	PWF
STOCK WIRE FENCE	SWF
TRELLIS FENCING	TLF

LEVEL INFORMATION

BASEMENT LEVEL	BTL
BED LEVEL	BL
COVER LEVEL	CL
DAMP PROOF COURSE	DPC
FLOOR LEVEL	FL
INVERT LEVEL	IL
OUTFALL LEVEL	OL
THRESHOLD LEVEL	THL
POOL WATER	PW
SURFACE WATER	SW
UNABLE TO LIFT	UTL
WATER LEVEL	WL

SURFACE INFORMATION

CONCRETE	Conc
BRICK PAVERS	BP
FLOWERBED	FB
PAVING SLABS	PS
RETAINING WALL	RWall
TACTILE PAVING	Tac

FEATURE INFORMATION

BOLLARD	BO	NOTICE BOARD	NB
BRITISH TELECOM BOX	BTB	POST	P
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BUS STOP	BS	RAISED FLOWERBED	RFB
CABLE TELEVISION BOX	CATB	ROAD SIGN	RS
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EARTHING ROD	ER	SERVICE MARKER POST	SMP
ELECTRICITY CABLE PIT	ELCP	SOIL VENT PIPE	SVP
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INSPECTION COVER	IC	TELEPHONE CALL BOX	TCB
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LITTER BIN	BIN	WATER METER	WM
KERB OUTLET	KO	WATER TAP	Tap
NAME PLATE	NP		

ONE HORTON HEATH

Level Datum:
Levels are related to a previos survey Ref (IR SAV 1.21) supplied by the client.

Grid:
Grid is related to a previous survey Ref (IR SAV 1 21)

Northpoint:

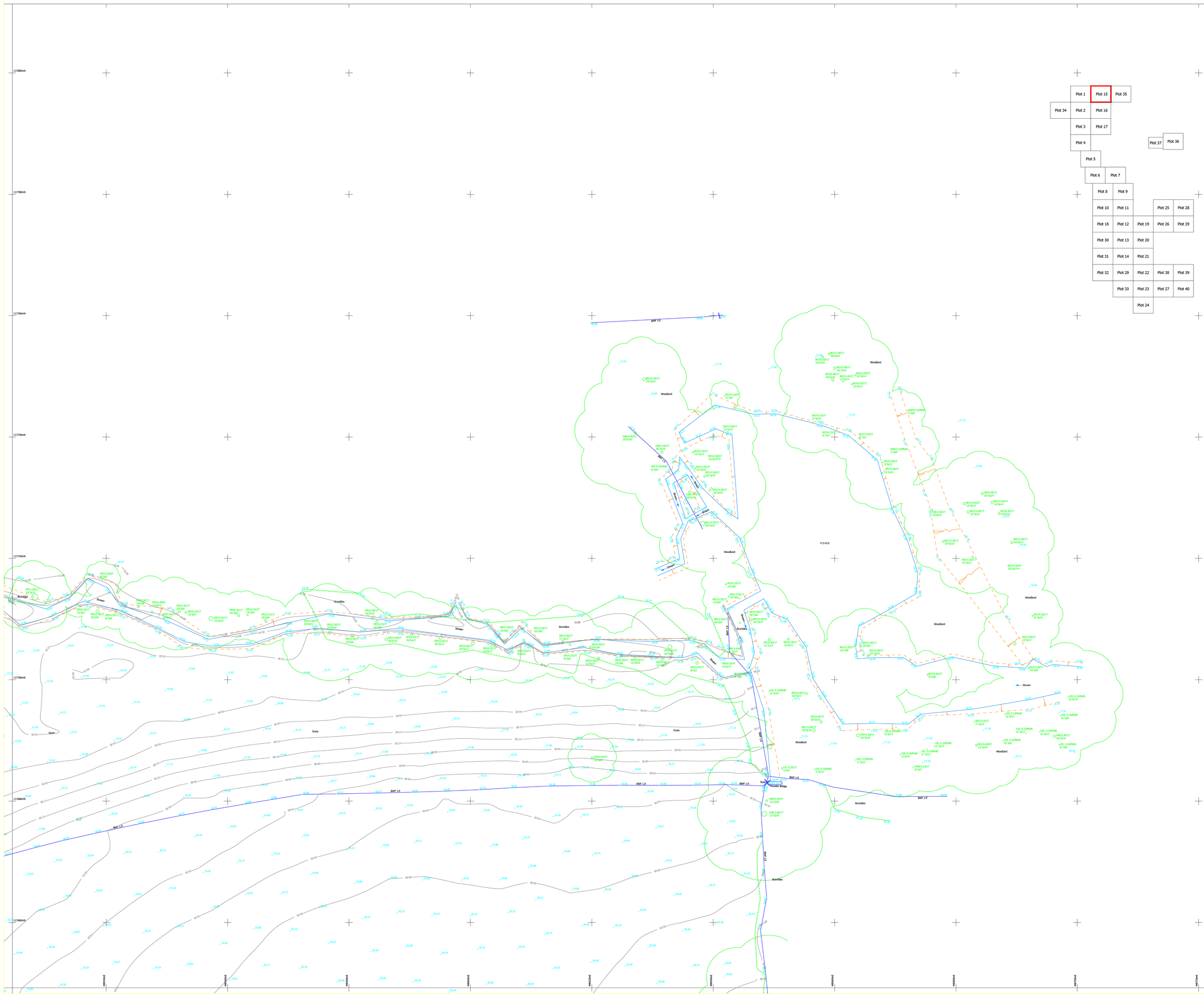
ENCOMPASS SURVEYS

Encompass Surveys Ltd
Unit 2
Dukes Green Business Centre
Duncan Road
Park Gate, Southampton
Hampshire SO31 7GA

Tel: 023 80692002 Email: info@encompass-surveys.co.uk
Fax: 023 80697125 Website: encompass-surveys.co.uk

Client:	Eastleigh Borough Council		
Survey Location:	Horton Heath Hampshire SO30 2PA		
Survey type:	Topographical	Scale:	1:200@A0
Drawing ref:	ENC/ONE-HH-FEB21	Date:	February 2021
Drawn/QA:	DH/GL	Plot No.	4 of 40

Plot 1, Plot 15, Plot 35
Plot 34, Plot 2, Plot 16
Plot 3, Plot 17
Plot 4
Plot 5
Plot 6, Plot 7
Plot 8, Plot 9
Plot 10, Plot 11, Plot 25, Plot 28
Plot 18, Plot 12, Plot 19, Plot 26, Plot 29
Plot 30, Plot 13, Plot 20
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Plot 32, Plot 29, Plot 22, Plot 38, Plot 39
Plot 33, Plot 23, Plot 27, Plot 40
Plot 24
Plot 37, Plot 36



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LEGEND

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LARCH	LAR	YEW	YEW
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TREE ANNOTATIONS: Tree Species / Tree Ball Size / No of Balls
Tree Height / Tree Canopy Spread

FENCE INFORMATION

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POST AND CHAIN FENCE	PCF
POST AND RAIL FENCE	PRF
POST AND WIRE FENCE	PWF
STOCK WIRE FENCE	SWF
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LEVEL INFORMATION

BASEMENT LEVEL	BTL
BED LEVEL	BL
COVER LEVEL	CL
DAMP PROOF COURSE	DPC
FLOOR LEVEL	FL
INVERT LEVEL	IL
OUTFALL LEVEL	OL
THRESHOLD LEVEL	THL
POOL WATER	PW
SURFACE WATER	SW
VARIABLE TO LIFT	VTL
WATER LEVEL	WL

SURFACE INFORMATION

CONCRETE	Conc
BRICK PAVERS	BP
FLOWERBED	FB
PAVING SLABS	PS
RETAINING WALL	RWall
TACTILE PAVING	Tac

FEATURE INFORMATION

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LITTER BIN	BIN	WATER METER	WM
KERB OUTLET	KO	WATER TAP	Tap
NAME PLATE	NP		

ONE HORTON HEATH

Level Datum:
Levels are related to a previos survey Ref (JR SAV 1.21) supplied by the client

Grid:
Grid is related to a previous survey Ref (JR SAV 1 21)

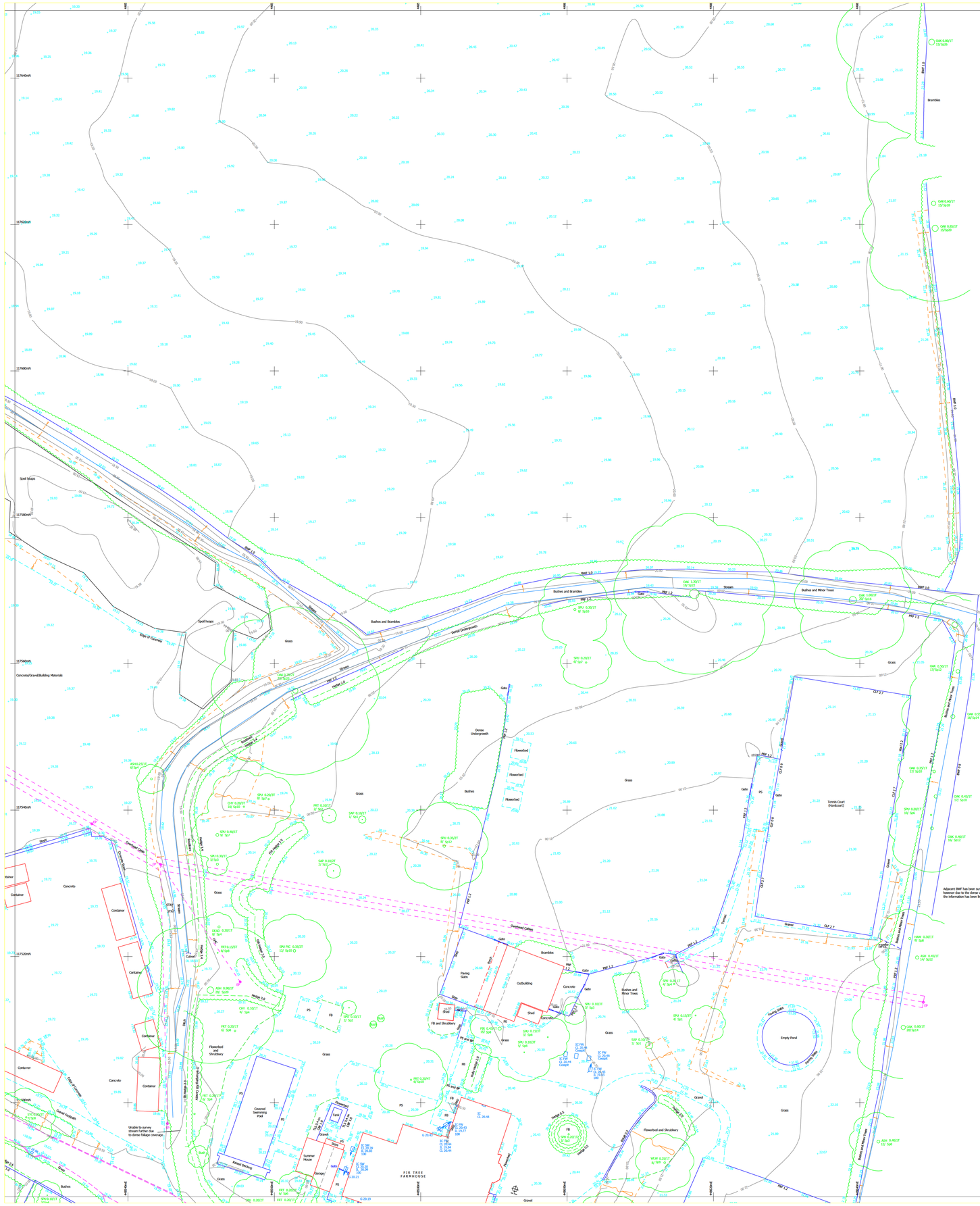
Northpoint:

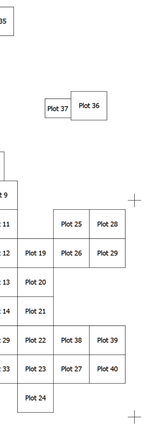
ENCOMPASS SURVEYS

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Unit 2
Talisman Business Centre
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Hampshire SO31 7GA

Tel: 023 80692002 Email: info@encompass-surveys.co.uk
Fax: 023 80697225 Website: encompass-surveys.co.uk

Client:	Eastleigh Borough Council		
Survey Location:	Horton Heath Hampshire SO30 2FA		
Survey type:	Topographical	Scale:	1:200@A0
Drawing ref:	ENC/ONE-HH-FEB21	Date:	February 2021
Drawn/QA:	DH/GL	Plot No.	15 of 40





NOTES:

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LEGEND

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FRUIT	FRT	ROWAN	RWN
HAWTHORN	HAW	SILVER BIRCH	SIB
HAZEL	HAZ	SORBUS	SOR
HOLLY	HLY	SWEET CHESTNUT	SCH
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TREE ANNOTATIONS: Tree Species / Tree Ball Size / No of Balls
Tree Height / Tree Canopy Spread

FENCE INFORMATION

BARBED WIRE FENCE	BWF
CORRUGATED IRON FENCE	CIF
CLOSE BOARD FENCE	CBF
CHAIN LINK FENCE	CLF
CHESTNUT PALING	CPF
CRASH BARRIER	CBR
HANDRAIL	HDL
IRON RAILINGS	IRF
LARCH LAP FENCE	LLF
MISCELLANEOUS FENCE	MSF
PALISADE FENCE	PSF
PICKET FENCE	PKF
POST AND CHAIN FENCE	PCF
POST AND RAIL FENCE	PRF
POST AND WIRE FENCE	PWF
STOCK WIRE FENCE	SWF
TRELLIS FENCING	TLF

LEVEL INFORMATION

BASEMENT LEVEL	BTL
BED LEVEL	BL
COVER LEVEL	CL
DAMP PROOF COURSE	DPC
FLOOR LEVEL	FL
INVERT LEVEL	IL
OUTFALL LEVEL	OL
THRESHOLD LEVEL	THL
POOL WATER	PW
SURFACE WATER	SW
VARIBLE TO LEFT	VTL
WATER LEVEL	WL

SURFACE INFORMATION

CONCRETE	Conc
BRICK PAVERS	BP
FLOWERBED	FB
PAVING SLABS	PS
RETAINING WALL	RWall
TACTILE PAVING	Tac

FEATURE INFORMATION

BOLLARD	BO	NOTICE BOARD	NB
BRITISH TELECOM BOX	BTB	POST	P
BRITISH TELECOM IC	BTIC	RAIN WATER PIPE	RWP
BUS STOP	BS	RAISED FLOWERBED	RFB
CABLE TELEVISION BOX	CATB	ROAD SIGN	RS
CABLE TELEVISION IC	CATV	RODDING EYE	RE
EARTHING ROD	ER	SERVICE MARKER POST	SMP
ELECTRICITY CABLE PIT	ELCP	SOIL VENT PIPE	SVP
ELECTRICITY CONTROL BOX	ECB	STOP COCK	SC
ELECTRICITY POLE	EP	STOP VALVE	SV
FIRE HYDRANT	FH	TELEGRAPH POLE	TP
INSPECTION COVER	IC	TELEPHONE CALL BOX	TCB
LAMP POST	LP	TRAFFIC SIGNAL	TS
LETTER BOX	LB	TRAFFIC SIGNALS IC	TSIC
LITTER BIN	BIN	WATER METER	WM
MBNA OUTLET	KO	WATER TAP	Tap
NAME PLATE	NP		

ONE HORTON HEATH

Level Datum:
Levels are related to a previos survey Ref (IR SAV 1.21) supplied by the client

Grid:
Grid is related to a previous survey Ref (IR SAV 1 21)

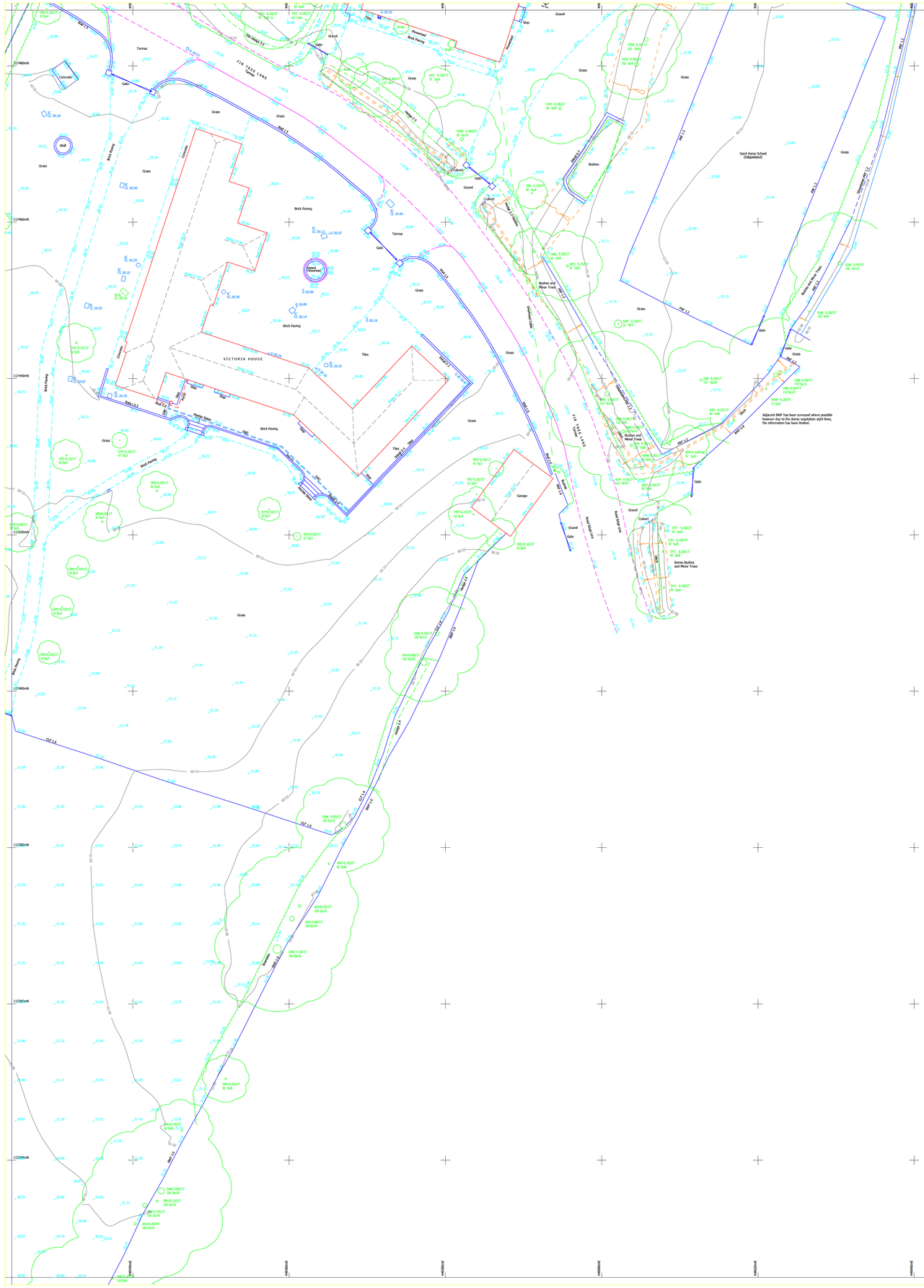
Northpoint:

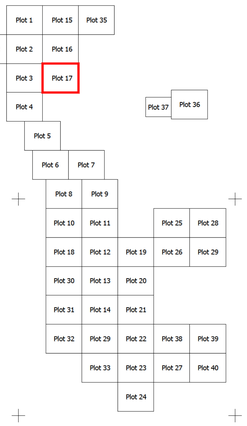
ENCOMPASS SURVEYS

Encompass Surveys Ltd
Unit 2
Tallyman Business Centre
Duncan Road
Park Gate, Southampton
Hampshire SO31 7GA

Tel: 023 80692002
Fax: 023 80697125
Email: info@encompass-surveys.co.uk
Website: encompass-surveys.co.uk

Client:	Eastleigh Borough Council		
Survey Location:	Horton Heath Hampshire SO30 2PA		
Survey type:	Topographical	Scale:	1:200@A0
Drawing ref:	ENC/ONE-HH-FEB21	Date:	February 2021
Drawn/QA:	DH/GL	Plot No.	16 of 40





NOTES:

Drainage:
Inspection Covers are lifted where possible and all drainage invert information has been obtained through visual inspection only, with no entry into manholes. Therefore the complete accuracy cannot be guaranteed. Where drainage is of critical importance we suggest the services of a specialist drainage expert be used.

Trees:
Every effort has been made to identify and detail all trees on site but where trees are of critical importance we suggest the use of a specialist such as an arborist. Tree spread and heights are indicative.

GPS:
GPS detail is relative to the time and date of survey. GPS levels and grid are obtained using Industry standard guidelines and can vary according to the quality of the GPS network at the time of survey. Unless stated otherwise, surveys are Scale factor 1 and Horizontal and Vertical Datums are established from a central site fix and baseline orientation station utilising GNSS correction data.

Survey notes:
Survey specification is linked to the original purpose of the survey commissioned at source and is to be used for this purpose only. Survey is accurate within limitations of site conditions at the time of survey. In areas difficult to survey due to restricted access, lines of sight or dense vegetation, critical dimensions and positions should be verified following suitable clearance.
Survey detail obtained and shown is relative to the plotting scale.

Copyright:
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LEGEND

TREE SPECIES INFORMATION

ALDER	ALD	LOCUST	LOC
ASH	ASH	LONDON PLANE	LPN
ASPEN	ASP	MAGNOLIA	MAG
BEECH	BCH	MAPLE	MPL
CEDAR	CED	OAK	OAK
CHERRY	CHY	PINE	PNE
CYPRESS	CYP	POPLAR	POP
ELM	ELM	PRUNUS	PNS
FIR	FIR	RHODODENDRONS	RDN
FRUIT	FRT	ROWAN	RWN
HAWTHORN	HAW	SILVER BIRCH	SBI
HAZEL	HAZ	SORBUS	SOR
HOLLY	HLY	SWEET CHESTNUT	SCH
HORSE CHESTNUT	HCH	SYCAMORE	SYC
HORNBEAM	HBM	WALNUT	WNT
LABURNUM	LBM	WILLOW	WLW
LARCH	LAR	YEW	YEW
LIME	LIM	SPECIES UNKNOWN	SPU
		COPPICED	COP

TREE ANNOTATIONS: Tree Species / Tree Bull Size / No of Bulls
Tree Height / Tree Canopy Spread

FENCE INFORMATION

BARBED WIRE FENCE	BWF
CORRUGATED IRON FENCE	CIF
CLOSE BOARD FENCE	CBF
CHAIN LINK FENCE	CLF
CHESTNUT PALING	CPF
CRASH BARRIER	CBR
HANDRAIL	HDL
IRON RAILINGS	IRF
LARCH LAP FENCE	LLF
MESH/LLAMEDOUS FENCE	MSF
PALISADE FENCE	PSF
PICKET FENCE	PKF
POST AND CHAIN FENCE	PCF
POST AND RAIL FENCE	PRF
POST AND WIRE FENCE	PWF
STOCK WIRE FENCE	SWF
TRELLIS FENCING	TLF

LEVEL INFORMATION

BASEMENT LEVEL	BTL
BED LEVEL	BL
COVER LEVEL	CL
DAMP PROOF COURSE	DPC
FLOOR LEVEL	FL
INVERT LEVEL	IL
OUTFALL LEVEL	OL
THRESHOLD LEVEL	THL
FOUL WATER	FW
SURFACE WATER	SW
UNABLE TO LIFT	UTL
WATER LEVEL	WL

SURFACE INFORMATION

CONCRETE	Conc
BRICK PAVERS	BP
FLOWERBED	FB
PAVING SLABS	PS
RETAINING WALL	RWall
TACTILE PAVING	Tac

FEATURE INFORMATION

BOLLARD	BO	NOTICE BOARD	NB
BRITISH TELECOM BOX	BTB	POST	P
BRITISH TELECOM IC	BTIC	RAIN WATER PIPE	RWP
BUS STOP	BS	RAISED FLOWERBED	RFB
CABLE TELEVISION BOX	CATB	ROAD SIGN	RS
CABLE TELEVISION IC	CATV	RODDING EYE	RE
EARTHING ROD	ER	SERVICE MARKER POST	SMP
ELECTRICITY CABLE PIT	ELCP	SOIL VENT PIPE	SVP
ELECTRICITY CONTROL BOX	ECB	STOP COCK	SC
ELECTRICITY POLE	EP	STOP VALVE	SV
FIRE HYDRANT	FH	TELEGRAPH POLE	TP
INSPECTION COVER	IC	TELEPHONE CALL BOX	TCB
LAMP POST	LP	TRAFFIC SIGNAL	TS
LETTER BOX	LB	TRAFFIC SIGNALS IC	TSIC
LITTER BIN	BIN	WATER METER	WM
KERB OUTLET	KO	WATER TAP	Tap
NAME PLATE	NP		

ONE HORTON HEATH

Level Datum:
Levels are related to a previos survey Ref (IR SAV 1.21) supplied by the client

Grid:
Grid is related to a previous survey Ref (IR SAV 1 21)

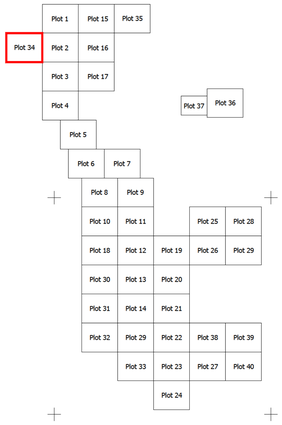
Northpoint:

ENCOMPASS SURVEYS

Encompass Surveys Ltd
Unit 2
Talisman Business Centre
Duncan Road
Park Gate, Southampton
Hampshire SO31 7GA

Tel: 023 80692902 Email: info@encompass-surveys.co.uk
Fax: 023 80697125 Website: encompass-surveys.co.uk

Client:	Eastleigh Borough Council		
Survey Location:	Horton Heath Hampshire SO30 2PA		
Survey type:	Topographical	Scale:	1:200@A0
Drawing ref:	ENC/ONE-HH-FEB21	Date:	February 2021
Drawn/QA:	DH/GL	Plot No.	17 of 40



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HORSE CHESTNUT	HCH	SYCAMORE	SYC
HORNBEAM	HRM	WALNUT	WNT
LABURNUM	LBM	WILLOW	WLW
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CHAIN LINK FENCE	CLF	DAMP PROOF COURSE	DPC
CHESTNUT PALING	CPF	FLOOR LEVEL	FL
CRASH BARRIER	CBR	INVERT LEVEL	IL
HANDRAIL	HDL	OUTFALL LEVEL	OL
IRON RAILINGS	IRF	THRESHOLD LEVEL	THL
LARCH LAP FENCE	LLF	POOL WATER	PW
MISCELLANEOUS FENCE	MSF	SURFACE WATER	SW
PALISADE FENCE	PSF	UNABLE TO LIFT	UTL
PICKET FENCE	PKF	WATER LEVEL	WL
POST AND CHAIN FENCE	PCF		
POST AND RAIL FENCE	PRF		
POST AND WIRE FENCE	PWF		
STOCK WIRE FENCE	SWF		
TRELLIS FENCING	TLF		

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BRICK PAVERS	BP
FLOWERBED	FB
PAVING SLABS	PS
RETAINING WALL	RWall
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BRITISH TELECOM IC	BTIC	RAIN WATER PIPE	RWP
BUS STOP	BS	RAISED FLOWERBED	RFB
CABLE TELEVISION BOX	CATB	ROAD SIGN	RS
CABLE TELEVISION IC	CATV	RODDING EYE	RE
EARTHING ROD	ER	SERVICE MARKER POST	SMP
ELECTRICITY CABLE PIT	ELCP	SOIL VENT PIPE	SVP
ELECTRICITY CONTROL BOX	ECB	STOP COCK	SC
ELECTRICITY POLE	EP	STOP VALVE	SV
FIRE HYDRANT	FH	TELEGRAPH POLE	TP
INSPECTION COVER	IC	TELEPHONE CALL BOX	TCB
LAMP POST	LP	TRAFFIC SIGNAL	TS
LETTER BOX	LB	TRAFFIC SIGNALS IC	TSIC
LITTER BIN	BIN	WATER METER	WM
KERB OUTLET	KO	WATER TAP	Tap
NAME PLATE	NP		

ONE HORTON HEATH

Level Datum:
Levels are related to a previos survey Ref (JR SAV 1.21) supplied by the client

Grid:
Grid is related to a previous survey Ref (JR SAV 1 21)

Northpoint:

ENCOMPASS SURVEYS

Encompass Surveys Ltd
Unit 2
Tallisman Business Centre
Duncan Road
Park Gate, Southampton
Hampshire SO31 7GA

Tel: 023 80603302 Email: info@encompass-surveys.co.uk
Fax: 023 80697125 Website: encompass-surveys.co.uk

Client:	Eastleigh Borough Council		
Survey Location:	Horton Heath Hampshire SO30 2FA		
Survey type:	Topographical	Scale:	1:200@A0
Drawing ref:	ENC/ONE-HH-FEB21	Date:	February 2021
Drawn/QA:	DH/JG	Plot No.	34 of 40

Appendix B

Proposed Site Layout

Eastleigh Borough Council



One Horton Heath, Quobleigh Breach

N

NOTES:

Report all discrepancies, errors and omissions.

Verify all dimensions on site before commencing any work on site or preparing shop drawings.

All materials, components and workmanship are to comply with the relevant British Standards, Codes of Practice, and appropriate manufacturers recommendations that from time to time shall apply.

For all specialist work, see relevant drawings.

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Registration number OC335948.

Rev	Date	Description

Project Title

Eastleigh Borough Council

Proposed Residential Development
One Horton Heath
Quobleigh Breach

Drawing Description

Proposed Site Layout Plan

Scale	Drawn by
1:1000 at A1	HP
Date	**Checked by**
June 2025	SW

CLAGUE ARCHITECTS

62 Burgate, Canterbury
Kent CT1 2BH 01227 762060

2 Kinsbourne Court, Luton Road,
Harpenden, Hertfordshire AL5 3BL 01582 765102

8, Disney Street
London SE1 1JF 0203 597 6112

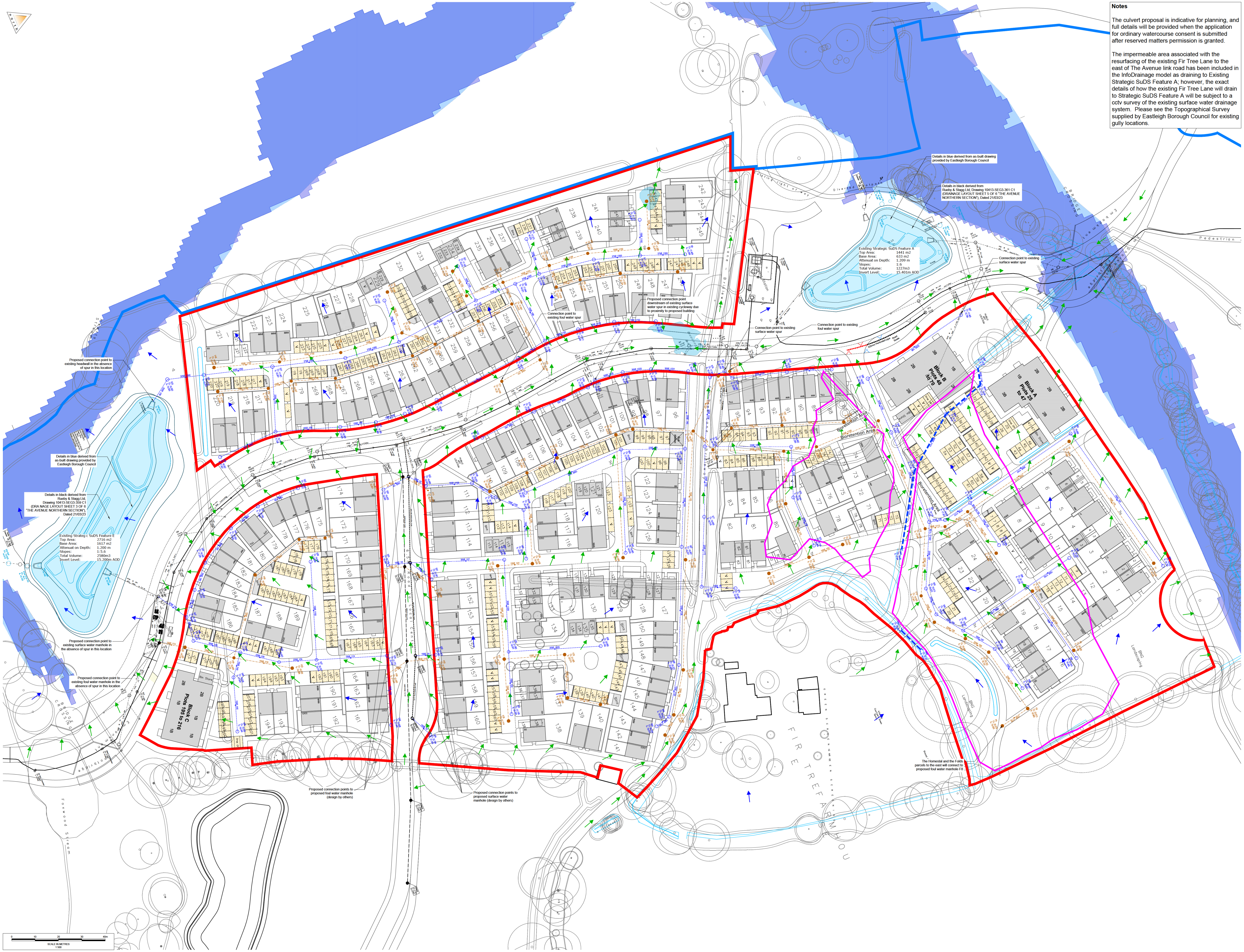
CANTERBURY LONDON HARPENDEN

Project . Originator . Function . Spatial . Form . Discipline . Number. Revision

30071D - CLA - PRSL - 00 - PD - A - 0001 - P4

Appendix C

Drainage Strategy Drawing



Notes

The culvert proposal is indicative for planning, and full details will be provided when the application for ordinary watercourse consent is submitted after reserved matters permission is granted.

The impermeable area associated with the resurfacing of the existing Fir Tree Lane to the east of The Avenue link road has been included in the InfoDrainage model as draining to Existing Strategic SuDS Feature A; however, the exact details of how the existing Fir Tree Lane will drain to Strategic SuDS Feature A will be subject to a cctv survey of the existing surface water drainage system. Please see the Topographical Survey supplied by Eastleigh Borough Council for existing gully locations.

Notes

1. All levels and dimensions are to be checked on site before any work commences. All dimensions are in metres unless stated otherwise.
2. Any discrepancies shall be reported to the engineer immediately, so that clarification can be sought prior to the commencement of works.
3. This drawing shall be read in conjunction with all other relevant engineering details, drawings and specification.
4. The contractor is to keep a record of any variations made on site, including the relocation of sewers or drains, for their "as built" drawings to be prepared upon project completion.
5. All works to adopted systems are to be carried out in accordance with Sewerage Sector Guidance Appendix C, Approved Version 2.1, 25 May 2021. All works to private drainage systems are to be in accordance with the Building Regulations Approved Document Part "H" 2015 edition.
6. 900mm min cover to be provided for private pipes laid beneath agricultural land and public open space unless not practicable. 1200mm min cover to be provided for highways and parking areas with unrestricted access to vehicles with a gross vehicle weight in excess of 7.5 tonnes unless not practicable. Where unachievable, shallow private drains may require protection using ductile iron pipe, concrete surround or concrete slabs bridging the trench, subject to the NHBC inspector's requirements.
7. All pipes shall be laid soffit to soffit with outgoing pipes unless otherwise stated.
8. Manholes situated within areas accessible to motor vehicles are to be fitted with suitable strength covers and frames. Please refer to the manhole schedule for guidance on this.
9. This drawing has been based upon survey information supplied by Eastleigh Borough Council, and Motion cannot guarantee the accuracy of the data provided.
10. Areas of proposed hardstanding will be designed to comply with building regulations and divert water away from the proposed buildings and a minimum of 300mm freeboard will be provided between the design event water levels in the low points of the proposed surface water drainage systems and the finished ground floor levels.
11. The top surface of the pervious pavement should finish at least 150mm below any adjoining DPC level. Advice should always be sought from the manufacturer.
12. Gullys and linear drainage channels are required to convey surface water for up to the 100 year + 45% climate change critical flow rate. Construction details and supporting calculations are to be provided at the detailed design stage.
13. Construction details for the Source Control SuDS are to be provided at the detailed design stage.
14. The culvert proposal is indicative for planning, and full details will be provided when the application for ordinary watercourse consent is submitted after reserved matters permission is granted.
15. The impermeable area associated with the resurfacing of the existing Fir Tree Lane to the east of The Avenue link road has been included in the InfoDrainage model as draining to Existing Strategic SuDS Feature A; however, the exact details of how the existing Fir Tree Lane will drain to Strategic SuDS Feature A will be subject to a cctv survey of the existing surface water drainage system. Please see the Topographical Survey supplied by Eastleigh Borough Council for existing gully locations.
16. The existing drainage information in the drawing is derived from Rueby & Stagg Ltd Drawings 10413-SEG3-358 to 362 C1; Ridge and Partners Drawing 5018551-RDG-Z02-ST-DR-C; PFA Consulting Drawing G277-82-85 Rev J; and as-built information supplied by Eastleigh Borough Council. Further information can be provided on request.

Legend

- Site Boundary
- Unlined Type C No Infiltration Pervious Pavement [300mm 4/40 coarse graded aggregate to BS EN 7533-13 subbase with 30% void ratio] with collector pipe(s) To Be Adopted by Eastleigh Borough Council
- Existing Strategic SuDS Features A and E To Be Adopted by Eastleigh Borough Council
- Proposed Swale With 1 in 4 Side Slopes To Be Adopted by Eastleigh Borough Council
- Surface Water Gravity Pipe To Be Adopted by Southern Water
- Surface Water Manhole To Be Adopted by Southern Water Unless Relating to Proposed Culvert
- Proposed Culvert To Be Adopted by Eastleigh Borough Council
- Proposed Headwall To Be Adopted by Eastleigh Borough Council
- Foul Water Gravity Pipe To Be Adopted by Southern Water
- Foul Water Manhole To Be Adopted by Southern Water
- Existing exceedance flow route
- Proposed exceedance flow route
- 1% AEP (1 in 100) Rivers Undefended Flood Risk Extent - includes the 'Central' climate change allowance for the 2080s epoch (2070-2125) for risk of flooding from rivers - Revision Date 27 August 2025)
- 0.1% AEP (1 in 1000) Rivers Undefended Flood Risk Extent - includes the 'Central' climate change allowance for the 2080s epoch (2070-2125) for risk of flooding from rivers - Revision Date 27 August 2025)
- Existing Catchments for Section of Ordinary Watercourse to be Culverted and Shallow Ditch Removed as Part of the Development
- Proposed Drainage Grips
- Features of existing road swale to be decommissioned
- Existing ordinary watercourses to be retained onsite
- Extent of flooding expected at the 1:100 + 45% climate change 15 minute winter event. A 50mm threshold has been used to remove areas where flooding is too shallow to be of note for the purposes of assessing flood risk to a development.

Rev.	Description	Drn	Chk	App	Date
P04	Updated following layout changes	CC	CG	JM	04/11/2025
P03	Third Issue	ST	CG	JM	29/10/2025
P02	Updated following layout changes	CC	CG	JM	17/10/2025
P01	First Issue	ST	CG	JM	11/09/2025

Drawing Status:

FOR PLANNING
NOT FOR CONSTRUCTION

motion
Guildford - Reading - London
www.motion.co.uk

Client:
Eastleigh Borough Council

Project:
Quobleigh Breach
One Horton Heath, Hampshire

Title:
Drainage Strategy

Scale: 1:500 (@ A0)

Drawing: 2103078-0501
Revision: P04

C:\Users\cgray\Motion\StaffSite - 1eaquo 2103078\Drawings\2103078-0501-P04 [Drainage Strategy].dwg

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Appendix D

Hydraulic Calculations

Quobleigh Breach Parcel of Development:	Date:		
One Horton Heath Hampshire	22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Name	Junction Type	Easting (m)	Northing (m)	Cover Level (m)	Depth (m)	Invert Level (m)	Chamber Shape	Diameter (m)	Lock
S32	Manhole	448362.778	117333.822	17.000	1.448	15.553	Circular	1.500	None
S31	Manhole	448371.113	117362.151	17.491	1.840	15.651	Circular	1.500	None
S25	Manhole	448380.043	117392.283	18.017	2.262	15.756	Circular	1.350	None
S24	Manhole	448382.811	117416.083	17.930	2.094	15.836	Circular	1.350	None
S22	Manhole	448379.509	117453.243	17.526	1.566	15.960	Circular	1.350	None
S18	Manhole	448379.784	117482.652	17.652	1.594	16.058	Circular	1.350	None
S12	Manhole	448383.420	117506.539	17.490	1.351	16.138	Circular	1.350	None
S11	Manhole	448389.685	117525.390	17.361	1.156	16.205	Circular	1.350	None
S9	Manhole	448396.828	117543.271	17.409	1.140	16.269	Circular	1.350	None
S35	Manhole	448503.679	117357.065	21.772	1.350	20.422	Circular	1.350	None
S37	Manhole	448493.764	117329.855	20.321	2.003	18.318	Circular	1.200	None
S38	Manhole	448488.321	117314.739	19.643	1.787	17.856	Circular	1.200	None
S48	Manhole	448465.518	117284.723	18.125	1.520	16.605	Circular	1.350	None
S36	Manhole	448454.220	117344.134	19.649	1.050	18.599	Circular	1.350	None
S39	Manhole	448508.261	117284.111	19.299	1.050	18.249	Circular	1.350	None
S40	Manhole	448492.493	117289.597	19.143	1.313	17.830	Circular	1.350	None
S41	Manhole	448477.986	117301.113	18.948	1.584	17.364	Circular	1.350	None
S34	Manhole	448531.585	117346.970	22.508	1.050	21.458	Circular	1.350	None
S54	Manhole	448438.205	117384.942	19.935	1.350	18.585	Circular	1.350	None
S53	Manhole	448468.670	117373.924	20.749	1.350	19.399	Circular	1.350	None
S29	Manhole	448397.816	117326.306	18.557	1.050	17.507	Circular	1.350	None
S30	Manhole	448397.189	117352.370	18.717	1.387	17.330	Circular	1.350	None
S59	Manhole	448486.197	117420.512	20.588	1.757	18.832	Circular	1.350	None
S62	Manhole	448504.004	117469.357	19.983	1.350	18.633	Circular	1.350	None
S67	Manhole	448514.515	117490.811	19.851	1.350	18.501	Circular	1.350	None
S51	Manhole	448481.546	117388.625	21.081	1.350	19.731	Circular	1.350	None
S52	Manhole	448443.934	117402.193	19.898	1.893	18.005	Circular	1.350	None
S50	Manhole	448511.978	117377.444	21.912	1.350	20.562	Circular	1.350	None
S66	Manhole	448557.119	117471.282	20.223	1.350	18.873	Circular	1.350	None
S65	Manhole	448575.773	117458.645	20.373	1.350	19.023	Circular	1.350	None
S64	Manhole	448577.481	117452.206	20.425	1.350	19.075	Circular	1.350	None
S68	Manhole	448473.206	117510.292	18.787	1.425	17.362	Circular	1.350	None
S63	Manhole	448462.715	117485.040	19.089	1.425	17.664	Circular	1.350	None
S61	Manhole	448463.481	117440.273	19.592	1.425	18.167	Circular	1.350	None

S60	Manhole	448489.513	117429.307	20.441	1.425	19.016	Circular	1.350	None
S57	Manhole	448548.109	117397.248	21.708	1.350	20.358	Circular	1.350	None
S56	Manhole	448536.467	117443.749	20.682	1.500	19.182	Circular	1.350	None
S58	Manhole	448523.124	117406.636	21.365	2.358	19.007	Circular	1.350	None
S10	Manhole	448375.579	117531.283	17.122	0.816	16.307	Circular	1.350	None
S13	Manhole	448363.977	117483.526	17.272	1.050	16.222	Circular	1.350	None
S23	Manhole	448364.088	117417.346	17.532	1.050	16.482	Circular	1.350	None
S46	Manhole	448445.659	117293.817	18.234	1.164	17.070	Circular	1.350	None
S45	Manhole	448436.775	117302.623	18.346	1.120	17.226	Circular	1.350	None
S44	Manhole	448427.638	117318.512	18.554	1.099	17.455	Circular	1.350	None
S43	Manhole	448423.570	117332.786	18.708	1.067	17.641	Circular	1.350	None
S42	Manhole	448423.177	117351.629	18.927	1.050	17.877	Circular	1.350	None
S33	Manhole	448358.356	117318.720	16.363	0.863	15.500	Circular	1.500	None
S21	Manhole	448363.093	117451.957	17.167	1.097	16.070	Circular	1.350	None
S28	Manhole	448406.288	117378.577	19.084	1.259	17.825	Circular	1.350	None
S27	Manhole	448410.431	117393.405	19.180	1.200	17.980	Circular	1.350	None
S26	Manhole	448412.002	117406.200	19.159	1.050	18.109	Circular	1.350	None
S2	Manhole	448411.963	117420.996	18.924	1.050	17.874	Circular	1.350	None
S3	Manhole	448409.242	117459.946	18.271	1.299	16.972	Circular	1.350	None
S8	Manhole	448407.013	117473.553	17.930	1.491	16.439	Circular	1.350	None
S20	Manhole	448379.680	117471.574	17.644	1.623	16.021	Circular	1.350	None
S6	Manhole	448408.160	117488.547	17.911	1.371	16.540	Circular	1.350	None
S5	Manhole	448411.314	117504.003	17.755	1.111	16.645	Circular	1.350	None
S4	Manhole	448418.173	117520.416	17.613	0.850	16.763	Circular	1.350	None
S71	Manhole	448430.896	117486.536	18.234	1.881	16.353	Circular	1.350	None
S70	Manhole	448436.168	117510.374	17.866	1.405	16.461	Circular	1.350	None
S69	Manhole	448443.263	117524.653	17.787	1.257	16.530	Circular	1.350	None
S102	Manhole	448434.536	117432.565	19.111	1.050	18.061	Circular	1.350	None
S103	Manhole	448433.080	117457.258	18.699	1.034	17.665	Circular	1.350	None
S104	Manhole	448432.710	117482.619	18.310	1.050	17.260	Circular	1.350	None
MDSuds feature E	Manhole	448393.596	117213.922	17.157	2.357	14.800	Circular	2.000	None
MDFlow Control	Manhole	448407.206	117231.131	16.200	1.098	15.102	Circular	1.200	None
MD39	Manhole	448460.641	117269.172	17.810	1.837	15.973	Circular	1.200	None
MD38	Manhole	448476.066	117250.345	17.919	1.784	16.135	Circular	1.200	None
MD37	Manhole	448493.487	117237.929	17.562	1.284	16.278	Circular	1.200	None
MD40	Manhole	448442.105	117278.363	18.005	2.620	15.385	Circular	1.200	None

MD36	Manhole	448422.097	117299.721	18.328	2.896	15.432	Circular	1.500	None
MD35	Manhole	448410.254	117336.030	18.670	3.176	15.494	Circular	1.200	None
MD34	Manhole	448411.995	117365.343	18.958	3.417	15.541	Circular	1.500	None
MD33	Manhole	448421.522	117401.467	19.226	3.628	15.598	Circular	1.500	None
MD32	Manhole	448424.628	117429.016	18.990	3.180	15.810	Circular	1.500	None
MD30	Manhole	448424.223	117503.925	17.848	1.425	16.423	Circular	1.200	None
MD31	Manhole	448420.354	117485.986	18.115	2.179	15.936	Circular	1.500	None
SWMH70	Manhole	448437.335	117396.983	19.500	3.380	16.120	Circular	1.350	None
S47	Manhole	448454.992	117285.975	18.150	1.660	16.490	Circular	1.350	None
S105	Manhole	448432.548	117498.799	18.046	1.639	16.407	Circular	1.350	None
SWMH69	Manhole	448471.473	117383.053	20.380	3.170	17.210	Circular	1.350	None
SWMH68	Manhole	448508.906	117369.380	21.500	3.480	18.020	Circular	1.350	None
SWMH67	Manhole	448532.953	117357.561	22.250	2.820	19.430	Circular	1.350	None
S49	Manhole	448542.337	117361.836	22.709	1.350	21.359	Circular	1.350	None
S108	Manhole	448450.726	117420.789	19.553	1.350	18.203	Circular	1.350	None
S107	Manhole	448460.250	117427.662	19.708	1.400	18.308	Circular	1.350	None
S106	Manhole	448469.926	117436.556	19.789	1.350	18.439	Circular	1.350	None

Inlets

Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S32	Inlet	S31-S32 Catchment Area (38)	(None)	No Restriction
	Inlet (1)	Catchment Area (39)	(None)	No Restriction
	Inlet (2)	Catchment Area (40)	(None)	No Restriction
S31	Inlet	59.38m - 14.007 50.83m - 14.007 50.83m - 14.007 59.38m - 14.007 50.83m - 14.007 S30-S31 Catchment Area (37)	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
	Inlet (1)	Catchment Area (41)	(None)	No Restriction
	Inlet (2)	Catchment Area (33) S25-S31	(None)	No Restriction
	Inlet (3)	Catchment Area (34)	(None)	No Restriction
	Inlet (4)	Catchment Area (35)	(None)	No Restriction
S25	Inlet	50.83m - 14.006 50.83m - 14.006 50.83m - 14.006 S24-S25	(None)	No Restriction
S24	Inlet	S22-S24 Catchment Area (25)	(None)	No Restriction
	Inlet (1)	S23-S24	(None)	No Restriction
	Inlet (2)	Catchment Area (26)	(None)	No Restriction
	Inlet (3)	Catchment Area (27) Catchment Area (28)	(None)	No Restriction
	Inlet (4)	Catchment Area (29)	(None)	No Restriction
S22	Inlet	59.38m - 14.004 59.38m - 14.004	(None)	No Restriction
	Inlet (1)	S21-S22	(None)	No Restriction
	Inlet (2)	Catchment Area (19) S20-S22	(None)	No Restriction
	Inlet (3)	Catchment Area (20)	(None)	No Restriction
S18	Inlet	S12-S18 S13-S18 50.83m - 16.003	(None)	No Restriction
S12	Inlet	S11-S12	(None)	No Restriction
	Inlet (1)	Catchment Area (10)	(None)	No Restriction
	Inlet (2)	Catchment Area (11)	(None)	No Restriction
	Inlet	S9-S11 S10-S11	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S11	Inlet (1)	Catchment Area (5)	(None)	No Restriction
	Inlet (2)	Catchment Area (8)	(None)	No Restriction
	Inlet (3)	Catchment Area (9)	(None)	No Restriction
S9	Inlet	50.83m - 16.000 50.83m - 16.000	(None)	No Restriction
	Inlet (1)	Catchment Area	(None)	No Restriction
	Inlet (2)	Catchment Area (1)	(None)	No Restriction
	Inlet (3)	Catchment Area (2)	(None)	No Restriction
S35	Inlet	S34-S35	(None)	No Restriction
S37	Inlet	50.83m - 9.002 50.83m - 9.002 50.83m - 9.002 50.83m - 9.002	(None)	No Restriction
	Inlet (1)	S35-S37 Catchment Area (69) Catchment Area (70) Catchment Area (71)	(None)	No Restriction
	Inlet (2)	S36-S37	(None)	No Restriction
S38	Inlet	50.83m - 9.003 50.83m - 9.003	(None)	No Restriction
	Inlet (1)	S37-S38 Catchment Area (67) Catchment Area (16)	(None)	No Restriction
	Inlet (2)	Catchment Area (66) Catchment Area (68) Catchment Area (123)	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S48	Inlet	S41-S47 Catchment Area (42) Catchment Area (57) Catchment Area (58)	(None)	No Restriction
	Inlet (1)	466.70m - 11.001	(None)	No Restriction
S36	Inlet	Catchment Area (43) Catchment Area (44) Catchment Area (45)	(None)	No Restriction
	Inlet (1)	Catchment Area (55) Catchment Area (56)	(None)	No Restriction
	Inlet (2)	Catchment Area (51)	(None)	No Restriction
S39	Inlet (1)	Catchment Area (125) Catchment Area (124)	(None)	No Restriction
S40	Inlet	59.38m - 11.001 59.38m - 11.001 59.38m - 11.001 Catchment Area (126)	(None)	No Restriction
	Inlet (2)	S39-S40	(None)	No Restriction
	Inlet (3)	Catchment Area (59)	(None)	No Restriction
	Inlet (4)	Catchment Area (60)	(None)	No Restriction
	Inlet	S40-S41	(None)	No Restriction
	Inlet (1)	S38-S41	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S41	Inlet (2)	Catchment Area (62) Catchment Area (63) Catchment Area (46) Catchment Area (47) Catchment Area (48) Catchment Area (49) Catchment Area (50) Catchment Area (52) Catchment Area (53) Catchment Area (54) Catchment Area (64) Catchment Area (65)	(None)	No Restriction
S34	Inlet	50.83m - 9.000 50.83m - 9.000 50.83m - 9.000 50.83m - 9.000	(None)	No Restriction
S54	Inlet	59.38m - 8.002	(None)	No Restriction
	Inlet (1)	64.69m - 8.001 64.69m - 8.001 64.69m - 8.001	(None)	No Restriction
	Inlet	50.83m - 8.001 50.83m - 8.001 50.83m - 8.000	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S53	Inlet (1)	50.83m - 8.000 50.83m - 8.000 50.83m - 8.000	(None)	No Restriction
S29	Inlet	48.30m - 22.000 48.30m - 22.000 64.66m - 22.000 64.66m - 22.000	(None)	No Restriction
S30	Inlet	S29-S30 S28-S30 Catchment Area (36)	(None)	No Restriction
S59	Inlet	S58-S59 Catchment Area (75) Catchment Area (94)	(None)	No Restriction
	Inlet (1)	81.82m - 1.002	(None)	No Restriction
	Inlet (2)	Catchment Area (73) Catchment Area (89)	(None)	No Restriction
S62	Inlet	80.81m - 3.000 80.81m - 3.000 80.81m - 3.000 80.81m - 3.000 59.38m - 3.000 59.38m - 3.000	(None)	No Restriction
	Inlet (1)	Catchment Area (91) Catchment Area (95) Catchment Area (96)	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S67	Inlet	50.83m - 4.003 50.83m - 4.003 50.83m - 4.003 59.38m - 4.003 59.38m - 4.003	(None)	No Restriction
	Inlet (1)	S66-S67 Catchment Area (116)	(None)	No Restriction
	Inlet (2)	Catchment Area (97) Catchment Area (92) Catchment Area (93)	(None)	No Restriction
S51	Inlet	64.69m - 7.000 50.83m - 7.000 50.83m - 7.000 50.83m - 7.000	(None)	No Restriction
	Inlet (1)	59.38m - 7.000	(None)	No Restriction
S52	Inlet	Catchment Area (105) Catchment Area (106)	(None)	No Restriction
	Inlet (1)	59.38m - 7.001 64.69m - 7.001 64.69m - 7.001 64.69m - 7.001	(None)	No Restriction
	Inlet (2)	S108-S52	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S50	Inlet	59.38m - 7.000 64.69m - 7.000 50.83m - 7.000 50.83m - 7.000 50.83m - 7.000	(None)	No Restriction
S66	Inlet	50.83m - 4.002 50.83m - 4.002 80.81m - 4.002 50.83m - 4.002	(None)	No Restriction
	Inlet (1)	S65-S66 Catchment Area (117)	(None)	No Restriction
S65	Inlet	50.83m - 4.001 50.83m - 4.001 50.83m - 4.001	(None)	No Restriction
	Inlet (1)	Catchment Area (118) S64-S65	(None)	No Restriction
S64	Inlet	50.83m - 4.000 50.83m - 4.000 50.83m - 4.000 50.83m - 4.000	(None)	No Restriction
	Inlet (1)	Catchment Area (120) Catchment Area (119)	(None)	No Restriction
	Inlet	S67-S68 Catchment Area (115)	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S68	Inlet (1)	S63-S68 Catchment Area (110) Catchment Area (112) Catchment Area (113) Catchment Area (111)	(None)	No Restriction
S63	Inlet	S61-S63 Catchment Area (109) 81.82m - 1.004 Catchment Area (107) Catchment Area (108)	(None)	No Restriction
	Inlet (1)	S62-S63 Catchment Area (98) Catchment Area (99) Catchment Area (100)	(None)	No Restriction
S61	Inlet (2)	Catchment Area (102)	(None)	No Restriction
S60	Inlet (1)	Catchment Area (90)	(None)	No Restriction
S57	Inlet	59.38m - 2.000 64.69m - 2.000 64.69m - 2.000	(None)	No Restriction
	Inlet (1)	Catchment Area (76)	(None)	No Restriction
	Inlet (2)	Catchment Area (77)	(None)	No Restriction
	Inlet (3)	Catchment Area (121)	(None)	No Restriction
S56	Inlet	59.38m - 1.000 59.38m - 1.000 Catchment Area (83)	(None)	No Restriction
	Inlet (1)	Catchment Area (78) Catchment Area (81) Catchment Area (82) Catchment Area (86)	(None)	No Restriction
	Inlet (2)	Catchment Area (87)	(None)	No Restriction
	Inlet (3)	Catchment Area (84)	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
	Inlet (4)	81.82m - 1.000 Catchment Area (85)	(None)	No Restriction
S58	Inlet	64.69m - 1.001 80.81m - 1.001 80.81m - 1.001	(None)	No Restriction
	Inlet (1)	S57-S58 Catchment Area (79) Catchment Area (74) Catchment Area (80)	(None)	No Restriction
	Inlet (2)	S56-S58	(None)	No Restriction
	Inlet (3)	Catchment Area (88)	(None)	No Restriction
S10	Inlet	80.81m - 17.000 80.81m - 17.000 50.83m - 17.000 50.83m - 17.000	(None)	No Restriction
	Inlet (1)	Catchment Area (4) Catchment Area (3) Catchment Area (6)	(None)	No Restriction
	Inlet (2)	Catchment Area (7)	(None)	No Restriction
S13	Inlet	80.81m - 18.000 80.81m - 18.000	(None)	No Restriction
	Inlet (1)	Catchment Area (14)	(None)	No Restriction
	Inlet (2)	Catchment Area (15)	(None)	No Restriction
	Inlet (3)	Catchment Area (17)	(None)	No Restriction
	Inlet (4)	Catchment Area (18)	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S23	Inlet	81.82m - 20.000 59.38m - 20.000 Catchment Area (32)	(None)	No Restriction
	Inlet (2)	Catchment Area (31)	(None)	No Restriction
S46	Inlet	64.66m - 12.004 64.66m - 12.004 S45-S46	(None)	No Restriction
S45	Inlet	56.55m - 12.003 56.55m - 12.003 S44-S45	(None)	No Restriction
S44	Inlet	56.55m - 12.002 56.55m - 12.002 S43-S44	(None)	No Restriction
S43	Inlet	S42-S43 64.66m - 12.001 64.66m - 12.001	(None)	No Restriction
S42	Inlet	56.55m - 12.000 56.55m - 12.000 56.55m - 12.000 56.55m - 12.000	(None)	No Restriction
S33	Inlet	S32-S33	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S21	Inlet	59.38m - 19.000 81.82m - 19.000 50.83m - 19.000	(None)	No Restriction
	Inlet (1)	Catchment Area (21) Catchment Area (24)	(None)	No Restriction
	Inlet (2)	Catchment Area (22)	(None)	No Restriction
	Inlet (3)	Catchment Area (23)	(None)	No Restriction
S28	Inlet	S27-S28 56.55m - 21.002 56.55m - 21.002 56.55m - 21.002	(None)	No Restriction
S27	Inlet	56.55m - 21.001 56.55m - 21.001 S26-S27	(None)	No Restriction
S26	Inlet	56.55m - 21.000 64.66m - 21.000 64.66m - 21.000	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S2	Inlet	56.55m - 14.000 56.55m - 14.000 56.55m - 14.000 56.55m - 14.000 56.55m - 14.000 56.55m - 14.000 56.55m - 14.000	(None)	No Restriction
S3	Inlet	S2-S3 64.66m - 14.001	(None)	No Restriction
S8	Inlet	S6-S8 S3-S8	(None)	No Restriction
S20	Inlet	50.83m - 14.003	(None)	No Restriction
	Inlet (1)	Catchment Area (12) S8-S20	(None)	No Restriction
	Inlet (2)	Catchment Area (13) S18-S20	(None)	No Restriction
S6	Inlet	64.66m - 15.002 S5-S6	(None)	No Restriction
S5	Inlet	S4-S5 48.30m - 15.001 48.30m - 15.001 48.30m - 15.001	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S4	Inlet	64.66m - 15.000 48.30m - 15.000 48.30m - 15.000 48.30m - 15.000 48.30m - 15.000	(None)	No Restriction
S71	Inlet	S104-S71 2750.00m - 1.009 S105-S71 48.30m - 1.008 48.30m - 1.008	(None)	No Restriction
S70	Inlet	S69-S70 48.30m - 1.008 64.66m - 1.007	(None)	No Restriction
S69	Inlet	S68-S69	(None)	No Restriction
	Inlet (1)	Catchment Area (114)	(None)	No Restriction
S102	Inlet	48.30m - 5.000 48.30m - 5.000 48.30m - 5.000 48.30m - 5.000 64.66m - 5.000	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S103	Inlet	S102-S103 64.66m - 5.001 64.66m - 5.001 48.30m - 5.001 48.30m - 5.001	(None)	No Restriction
S104	Inlet	S103-S104	(None)	No Restriction
MDSuds feature E	Inlet	MDFlow Control -MDSuds feature E	(None)	No Restriction
MDFlow Control	Inlet	Basin E Outlet	(None)	No Restriction
MD39	Inlet	370.00m - 13.002 MD38-MD39	(None)	No Restriction
MD38	Inlet	410.00m - 13.001 MD37-MD38	(None)	No Restriction
MD37	Inlet	260.00m - 13.000	(None)	No Restriction
MD40	Inlet	140.00m - 1.016 MD39-MD40 MD36-MD40	(None)	No Restriction
	Inlet (1)	S47-MD40	(None)	No Restriction
MD36	Inlet	410.00m - 1.015 MD35-MD36	(None)	No Restriction
MD35	Inlet	MD34-MD35 490.00m - 1.014	(None)	No Restriction
MD34	Inlet	590.00m - 1.013 MD33-MD34	(None)	No Restriction
MD33	Inlet	400.00m - 1.012 MD32-MD33 SWMH70-MD33	(None)	No Restriction

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
MD32	Inlet	MD31-MD32 430.00m - 1.011	(None)	No Restriction
MD30	Inlet	420.00m - 6.000	(None)	No Restriction
MD31	Inlet	830.00m - 1.010 MD30-MD31 S71-MD31	(None)	No Restriction
SWMH70	Inlet	S54-SWMH70 S52-SWMH70	(None)	No Restriction
	Inlet (1)	SWMH69-SWMH70	(None)	No Restriction
S47	Inlet	S46-S47	(None)	No Restriction
	Inlet (1)	S48-S47	(None)	No Restriction
S105	Inlet	S70-S105 48.30m - 1.008 48.30m - 1.008	(None)	No Restriction
SWMH69	Inlet	SWMH68-SWMH69	(None)	No Restriction
	Inlet (1)	S51-SWMH69 S59-SWMH69	(None)	No Restriction
	Inlet (2)	S53-SWMH69	(None)	No Restriction
SWMH68	Inlet	SWMH67-SWMH68	(None)	No Restriction
	Inlet (1)	S50-SWMH68	(None)	No Restriction
SWMH67	Inlet	S49-SWMH67	(None)	No Restriction
S49	Inlet	Catchment Area (122)	(None)	No Restriction
S108	Inlet	S107-S108	(None)	No Restriction
S107	Inlet	Catchment Area (104) Catchment Area (103) S106-S107	(None)	No Restriction
	Inlet	S60-S106 Catchment Area (101)	(None)	No Restriction

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S106	Inlet (1)	50.83m - 1.003 50.83m - 1.003 50.83m - 1.003	(None)	No Restriction

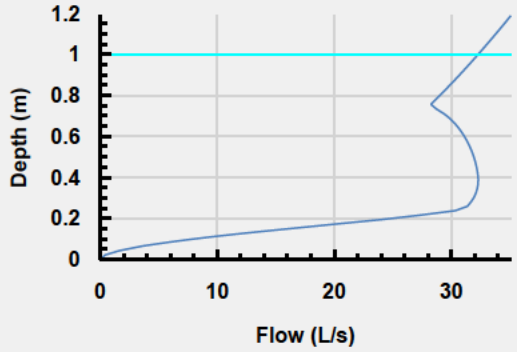
Outlets

Junction	Outlet Name	Outgoing Connection	Outlet Type
S32	Outlet	S32-S33	Free Discharge
S31	Outlet	S31-S32	Free Discharge
S25	Outlet	S25-S31	Free Discharge
S24	Outlet	S24-S25	Free Discharge
S22	Outlet	S22-S24	Free Discharge
S18	Outlet	S18-S20	Free Discharge
S12	Outlet	S12-S18	Free Discharge
S11	Outlet	S11-S12	Free Discharge
S9	Outlet	S9-S11	Free Discharge
S35	Outlet	S35-S37	Free Discharge
S37	Outlet	S37-S38	Free Discharge
S38	Outlet	S38-S41	Free Discharge
S48	Outlet	S48-S47	Free Discharge
S36	Outlet	S36-S37	Free Discharge
S39	Outlet	S39-S40	Free Discharge
S40	Outlet	S40-S41	Free Discharge
S41	Outlet	S41-S47	Free Discharge
S34	Outlet	S34-S35	Free Discharge
S54	Outlet	S54-SWMH70	Free Discharge
S53	Outlet	S53-SWMH69	Free Discharge
S29	Outlet	S29-S30	Free Discharge
S30	Outlet	S30-S31	Free Discharge
S59	Outlet	S59-SWMH69	Free Discharge
S62	Outlet	S62-S63	Free Discharge
S67	Outlet	S67-S68	Free Discharge
S51	Outlet	S51-SWMH69	Free Discharge
S52	Outlet	S52-SWMH70	Free Discharge
S50	Outlet	S50-SWMH68	Free Discharge
S66	Outlet	S66-S67	Free Discharge
S65	Outlet	S65-S66	Free Discharge
S64	Outlet	S64-S65	Free Discharge

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Junctions Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Junction	Outlet Name	Outgoing Connection	Outlet Type
S68	Outlet	S68-S69	Free Discharge
S63	Outlet	S63-S68	Free Discharge
S61	Outlet	S61-S63	Free Discharge
S60	Outlet	S60-S106	Free Discharge
S57	Outlet	S57-S58	Free Discharge
S56	Outlet	S56-S58	Free Discharge
S58	Outlet	S58-S59	Free Discharge
S10	Outlet	S10-S11	Free Discharge
S13	Outlet	S13-S18	Free Discharge
S23	Outlet	S23-S24	Free Discharge
S46	Outlet	S46-S47	Free Discharge
S45	Outlet	S45-S46	Free Discharge
S44	Outlet	S44-S45	Free Discharge
S43	Outlet	S43-S44	Free Discharge
S42	Outlet	S42-S43	Free Discharge
S33	Outlet	S33-BasinE	Free Discharge
S21	Outlet	S21-S22	Free Discharge
S28	Outlet	S28-S30	Free Discharge
S27	Outlet	S27-S28	Free Discharge
S26	Outlet	S26-S27	Free Discharge
S2	Outlet	S2-S3	Free Discharge
S3	Outlet	S3-S8	Free Discharge
S8	Outlet	S8-S20	Free Discharge
S20	Outlet	S20-S22	Free Discharge
S6	Outlet	S6-S8	Free Discharge
S5	Outlet	S5-S6	Free Discharge
S4	Outlet	S4-S5	Free Discharge
S71	Outlet	S71-MD31	Free Discharge
S70	Outlet	S70-S105	Free Discharge
S69	Outlet	S69-S70	Free Discharge
S102	Outlet	S102-S103	Free Discharge
S103	Outlet	S103-S104	Free Discharge
S104	Outlet	S104-S71	Free Discharge
	Outlet	MDFlow Control -MDSuds feature E	Hydro-Brake®

Junction	Outlet Name	Outgoing Connection	Outlet Type
MDFlow Control	Invert Level (m): 15.102 Design Depth (m): 1.000 Design Flow (L/s): 32.3 Objective: Minimise Upstream Storage Requirements Application: Surface Water Only Sump Available: ☑ Unit Reference: SHE-0244-3230-1000-3230		



MD39	Outlet	MD39-MD40	Free Discharge
MD38	Outlet	MD38-MD39	Free Discharge
MD37	Outlet	MD37-MD38	Free Discharge
MD40	Outlet	MD40-MD Basin Inlet	Free Discharge
MD36	Outlet	MD36-MD40	Free Discharge
MD35	Outlet	MD35-MD36	Free Discharge
MD34	Outlet	MD34-MD35	Free Discharge
MD33	Outlet	MD33-MD34	Free Discharge
MD32	Outlet	MD32-MD33	Free Discharge
MD30	Outlet	MD30-MD31	Free Discharge
MD31	Outlet	MD31-MD32	Free Discharge
SWMH70	Outlet	SWMH70-MD33	Free Discharge
S47	Outlet	S47-MD40	Free Discharge
S105	Outlet	S105-S71	Free Discharge
SWMH69	Outlet	SWMH69-SWMH70	Free Discharge

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Junctions Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Junction	Outlet Name	Outgoing Connection	Outlet Type
SWMH68	Outlet	SWMH68-SWMH69	Free Discharge
SWMH67	Outlet	SWMH67-SWMH68	Free Discharge
S49	Outlet	S49-SWMH67	Free Discharge
S108	Outlet	S108-S52	Free Discharge
S107	Outlet	S107-S108	Free Discharge
S106	Outlet	S106-S107	Free Discharge

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Stormwater Controls Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		



Basin E

Type : Pond

Dimensions

Exceedance Level (m)	16.400
Depth (m)	1.200
Base Level (m)	15.200
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	100
Average Slope (1:X)	5.593
Total Volume (m³)	2572.302

Depth (m)	Area (m²)	Volume (m³)
0.000	1617.940	0.000
1.200	2716.398	2572.302

Inlets

Inlet

Inlet Type	Point Inflow
Incoming Item(s)	S33-BasinE
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet (1

Inlet Type	Point Inflow
Incoming Item(s)	MD40-MD Basin Inlet
Bypass Destination	(None)
Capacity Type	No Restriction

Quobleigh Breach Parcel of Development:	Date:		
One Horton Heath Hampshire	22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Outlets

Outlet

Outgoing Connection	Basin E Outlet
Outlet Type	Free Discharge

Advanced

Perimeter	Circular
Length (m)	105.023
Friction Scheme	Manning's n
n	0.001

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Manhole Schedule Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S32	17.000 15.553	Diameter / Length: 1.500	{1} S31-S32	Pipe	15.553	Diam/Width:525	Manhole
E:448362.778 N:117333.822	1.448		{a} S32-S33	Pipe	15.553	Diam/Width:525	Not Applicable
S31	17.491 15.651	Diameter / Length: 1.500	{1} S30-S31	Pipe	15.651	Diam/Width:225	Manhole
E:448371.113 N:117362.151	1.840		{2} S25-S31	Pipe	15.651	Diam/Width:375	
			{a} S31-S32	Pipe	15.651	Diam/Width:525	Not Applicable
S25	18.017 15.756	Diameter / Length: 1.350	{1} S24-S25	Pipe	15.756	Diam/Width:375	Manhole
E:448380.043 N:117392.283	2.262		{a} S25-S31	Pipe	15.756	Diam/Width:375	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S24	17.930 15.836	Diameter / Length: 1.350	{1} S22-S24	Pipe	15.836	Diam/Width:375	Manhole
E:448382.811 N:117416.083	2.094		{2} S23-S24	Pipe	15.836	Diam/Width:150	
			{a} S24-S25	Pipe	15.836	Diam/Width:375	Not Applicable
S22	17.526 15.960	Diameter / Length: 1.350	{1} S21-S22	Pipe	15.960	Diam/Width:150	Manhole
E:448379.509 N:117453.243	1.566		{2} S20-S22	Pipe	15.960	Diam/Width:375	
			{a} S22-S24	Pipe	15.960	Diam/Width:375	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S18	17.652 16.058	Diameter / Length: 1.350	{1} S12-S18	Pipe	16.058	Diam/Width:375	Manhole
E:448379.784 N:117482.652	1.594		{2} S13-S18	Pipe	16.058	Diam/Width:150	
			{a} S18-S20	Pipe	16.058	Diam/Width:375	Not Applicable
S12	17.490 16.138	Diameter / Length: 1.350	{1} S11-S12	Pipe	16.138	Diam/Width:375	Manhole
E:448383.420 N:117506.539	1.351		{a} S12-S18	Pipe	16.138	Diam/Width:375	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S11	17.361 16.205	Diameter / Length: 1.350	{1} S9-S11	Pipe	16.205	Diam/Width:375	Manhole
E:448389.685 N:117525.390	1.156		{2} S10-S11	Pipe	16.205	Diam/Width:150	
			{a} S11-S12	Pipe	16.205	Diam/Width:375	Not Applicable
S9	17.409 16.269	Diameter / Length: 1.350					Manhole
E:448396.828 N:117543.271	1.140		{a} S9-S11	Pipe	16.269	Diam/Width:375	Not Applicable
S35	21.772 20.422	Diameter / Length: 1.350	{1} S34-S35	Pipe	20.422	Diam/Width:150	Manhole
E:448503.679 N:117357.065	1.350		{a} S35-S37	Pipe	20.422	Diam/Width:150	Not Applicable

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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S37	20.321 18.318	Diameter / Length: 1.200	{1} S35-S37	Pipe	18.318	Diam/Width:150	Manhole
E:448493.764 N:117329.855	2.003		{2} S36-S37	Pipe	18.318	Diam/Width:150	
			{a} S37-S38	Pipe	18.318	Diam/Width:225	Not Applicable
S38	19.643 17.856	Diameter / Length: 1.200	{1} S37-S38	Pipe	17.856	Diam/Width:225	Manhole
E:448488.321 N:117314.739	1.787		{a} S38-S41	Pipe	17.856	Diam/Width:225	Not Applicable
S48	18.125 16.605	Diameter / Length: 1.350	{1} S41-S47	Pipe	16.605	Diam/Width:300	Manhole
E:448465.518 N:117284.723	1.520		{a} S48-S47	Pipe	16.625	Diam/Width:300	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S36	19.649 18.599	Diameter / Length: 1.350					Manhole
E:448454.220 N:117344.134	1.050		{a} S36-S37	Pipe	18.599	Diam/Width:150	Not Applicable
S39	19.299 18.249	Diameter / Length: 1.350					Manhole
E:448508.261 N:117284.111	1.050		{a} S39-S40	Pipe	18.249	Diam/Width:150	Not Applicable
S40	19.143 17.830	Diameter / Length: 1.350	{1} S39-S40	Pipe	17.830	Diam/Width:150	Manhole
E:448492.493 N:117289.597	1.313		{a} S40-S41	Pipe	17.830	Diam/Width:150	Not Applicable

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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S41	18.948 17.364	Diameter / Length: 1.350	{1} S40-S41	Pipe	17.364	Diam/Width:150	Manhole
E:448477.986 N:117301.113	1.584		{2} S38-S41	Pipe	17.364	Diam/Width:225	
			{a} S41-S47	Pipe	17.364	Diam/Width:300	Not Applicable
S34	22.508 21.458	Diameter / Length: 1.350					Manhole
E:448531.585 N:117346.970	1.050		{a} S34-S35	Pipe	21.458	Diam/Width:150	Not Applicable
S54	19.935 18.585	Diameter / Length: 1.350					Manhole
E:448438.205 N:117384.942	1.350		{a} S54-SWMH70	Pipe	18.585	Diam/Width:150	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S53	20.749 19.399	Diameter / Length: 1.350					Manhole
E:448468.670 N:117373.924	1.350		{a} S53-SWMH69	Pipe	19.399	Diam/Width:150	Not Applicable
S29	18.557 17.507	Diameter / Length: 1.350					Manhole
E:448397.816 N:117326.306	1.050		{a} S29-S30	Pipe	17.507	Diam/Width:150	Not Applicable
S30	18.717 17.330	Diameter / Length: 1.350	{1} S29-S30 {2} S28-S30	Pipe Pipe	17.330 17.330	Diam/Width:150 Diam/Width:150	Manhole
E:448397.189 N:117352.370	1.387		{a} S30-S31	Pipe	17.330	Diam/Width:225	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S59	20.588 18.832	Diameter / Length: 1.350	{1} S58-S59	Pipe	18.832	Diam/Width:300	Manhole
E:448486.197 N:117420.512	1.757		{a} S59-SWMH69	Pipe	18.832	Diam/Width:300	Not Applicable
S62	19.983 18.633	Diameter / Length: 1.350					Manhole
E:448504.004 N:117469.357	1.350		{a} S62-S63	Pipe	18.633	Diam/Width:150	Not Applicable
S67	19.851 18.501	Diameter / Length: 1.350	{1} S66-S67	Pipe	18.501	Diam/Width:150	Manhole
E:448514.515 N:117490.811	1.350		{a} S67-S68	Pipe	18.501	Diam/Width:150	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S51	21.081 19.731	Diameter / Length: 1.350					Manhole
E:448481.546 N:117388.625	1.350		{a} S51-SWMH69	Pipe	19.731	Diam/Width:150	Not Applicable
S52	19.898 18.005	Diameter / Length: 1.350	{1} S108-S52	Pipe	18.005	Diam/Width:150	Manhole
E:448443.934 N:117402.193	1.893		{a} S52-SWMH70	Pipe	18.005	Diam/Width:150	Not Applicable
S50	21.912 20.562	Diameter / Length: 1.350					Manhole
E:448511.978 N:117377.444	1.350		{a} S50-SWMH68	Pipe	20.562	Diam/Width:150	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S66	20.223 18.873	Diameter / Length: 1.350	{1} S65-S66	Pipe	18.873	Diam/Width:150	Manhole
E:448557.119 N:117471.282	1.350		{a} S66-S67	Pipe	18.873	Diam/Width:150	Not Applicable
S65	20.373 19.023	Diameter / Length: 1.350	{1} S64-S65	Pipe	19.023	Diam/Width:150	Manhole
E:448575.773 N:117458.645	1.350		{a} S65-S66	Pipe	19.023	Diam/Width:150	Not Applicable
S64	20.425 19.075	Diameter / Length: 1.350					Manhole
E:448577.481 N:117452.206	1.350		{a} S64-S65	Pipe	19.075	Diam/Width:150	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Manhole Schedule Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S68	18.787 17.362	Diameter / Length: 1.350	{1} S67-S68	Pipe	17.437	Diam/Width:150	Manhole
E:448473.206 N:117510.292	1.425		{2} S63-S68	Pipe	17.362	Diam/Width:225	
			{a} S68-S69	Pipe	17.362	Diam/Width:300	Not Applicable
S63	19.089 17.664	Diameter / Length: 1.350	{1} S61-S63	Pipe	17.739	Diam/Width:150	Manhole
E:448462.715 N:117485.040	1.425		{2} S62-S63	Pipe	17.739	Diam/Width:150	
			{a} S63-S68	Pipe	17.664	Diam/Width:225	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Manhole Schedule Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S61	19.592 18.167	Diameter / Length: 1.350					Manhole
E:448463.481 N:117440.273	1.425		{a} S61-S63	Pipe	18.167	Diam/Width:150	Not Applicable
S60	20.441 19.016	Diameter / Length: 1.350					Manhole
E:448489.513 N:117429.307	1.425		{a} S60-S106	Pipe	19.016	Diam/Width:150	Not Applicable
S57	21.708 20.358	Diameter / Length: 1.350					Manhole
E:448548.109 N:117397.248	1.350		{a} S57-S58	Pipe	20.358	Diam/Width:150	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S56	20.682 19.182	Diameter / Length: 1.350					Manhole
E:448536.467 N:117443.749	1.500		{a} S56-S58	Pipe	19.182	Diam/Width:300	Not Applicable
S58	21.365 19.007	Diameter / Length: 1.350	{1} S57-S58 {2} S56-S58	Pipe Pipe	19.157 19.007	Diam/Width:150 Diam/Width:300	Manhole
E:448523.124 N:117406.636	2.358		{a} S58-S59	Pipe	19.007	Diam/Width:300	Not Applicable
S10	17.122 16.307	Diameter / Length: 1.350					Manhole
E:448375.579 N:117531.283	0.816		{a} S10-S11	Pipe	16.307	Diam/Width:150	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S13	17.272 16.222	Diameter / Length: 1.350					Manhole
E:448363.977 N:117483.526	1.050		{a} S13-S18	Pipe	16.222	Diam/Width:150	Not Applicable
S23	17.532 16.482	Diameter / Length: 1.350					Manhole
E:448364.088 N:117417.346	1.050		{a} S23-S24	Pipe	16.482	Diam/Width:150	Not Applicable
S46	18.234 17.070	Diameter / Length: 1.350	{1} S45-S46	Pipe	17.070	Diam/Width:150	Manhole
E:448445.659 N:117293.817	1.164		{a} S46-S47	Pipe	17.070	Diam/Width:150	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S45	18.346 17.226	Diameter / Length: 1.350	{1} S44-S45	Pipe	17.226	Diam/Width:150	Manhole
E:448436.775 N:117302.623	1.120		{a} S45-S46	Pipe	17.226	Diam/Width:150	Not Applicable
S44	18.554 17.455	Diameter / Length: 1.350	{1} S43-S44	Pipe	17.456	Diam/Width:150	Manhole
E:448427.638 N:117318.512	1.099		{a} S44-S45	Pipe	17.455	Diam/Width:150	Not Applicable
S43	18.708 17.641	Diameter / Length: 1.350	{1} S42-S43	Pipe	17.641	Diam/Width:150	Manhole
E:448423.570 N:117332.786	1.067		{a} S43-S44	Pipe	17.641	Diam/Width:150	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S42	18.927 17.877	Diameter / Length: 1.350					Manhole
E:448423.177 N:117351.629	1.050		{a} S42-S43	Pipe	17.877	Diam/Width:150	Not Applicable
S33	16.363 15.500	Diameter / Length: 1.500	{1} S32-S33	Pipe	15.500	Diam/Width:525	Manhole
E:448358.356 N:117318.720	0.863		{a} S33-BasinE	Pipe	15.500	Diam/Width:525	Not Applicable
S21	17.167 16.070	Diameter / Length: 1.350					Manhole
E:448363.093 N:117451.957	1.097		{a} S21-S22	Pipe	16.070	Diam/Width:150	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S28	19.084 17.825	Diameter / Length: 1.350	{1} S27-S28	Pipe	17.825	Diam/Width:150	Manhole
E:448406.288 N:117378.577	1.259		{a} S28-S30	Pipe	17.825	Diam/Width:150	Not Applicable
S27	19.180 17.980	Diameter / Length: 1.350	{1} S26-S27	Pipe	17.980	Diam/Width:150	Manhole
E:448410.431 N:117393.405	1.200		{a} S27-S28	Pipe	17.980	Diam/Width:150	Not Applicable
S26	19.159 18.109	Diameter / Length: 1.350					Manhole
E:448412.002 N:117406.200	1.050		{a} S26-S27	Pipe	18.109	Diam/Width:150	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S2	18.924 17.874	Diameter / Length: 1.350					Manhole
E:448411.963 N:117420.996	1.050		{a} S2-S3	Pipe	17.874	Diam/Width:150	Not Applicable
S3	18.271 16.972	Diameter / Length: 1.350	{1} S2-S3	Pipe	16.972	Diam/Width:150	Manhole
E:448409.242 N:117459.946	1.299		{a} S3-S8	Pipe	16.972	Diam/Width:150	Not Applicable
S8	17.930 16.439	Diameter / Length: 1.350	{1} S6-S8	Pipe	16.439	Diam/Width:150	Manhole
E:448407.013 N:117473.553	1.491		{2} S3-S8	Pipe	16.439	Diam/Width:150	
			{a} S8-S20	Pipe	16.439	Diam/Width:150	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S20	17.644 16.021	Diameter / Length: 1.350	{1} S8-S20	Pipe	16.021	Diam/Width:150	Manhole
E:448379.680 N:117471.574	1.623		{2} S18-S20	Pipe	16.021	Diam/Width:375	
			{a} S20-S22	Pipe	16.021	Diam/Width:375	Not Applicable
S6	17.911 16.540	Diameter / Length: 1.350	{1} S5-S6	Pipe	16.540	Diam/Width:150	Manhole
E:448408.160 N:117488.547	1.371		{a} S6-S8	Pipe	16.540	Diam/Width:150	Not Applicable
S5	17.755 16.645	Diameter / Length: 1.350	{1} S4-S5	Pipe	16.645	Diam/Width:150	Manhole
E:448411.314 N:117504.003	1.111		{a} S5-S6	Pipe	16.645	Diam/Width:150	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S4	17.613 16.763	Diameter / Length: 1.350					Manhole
E:448418.173 N:117520.416	0.850		{a} S4-S5	Pipe	16.763	Diam/Width:150	Not Applicable
S71	18.234 16.353	Diameter / Length: 1.350	{1} S104-S71	Pipe	16.590	Diam/Width:150	Manhole
E:448430.896 N:117486.536	1.881		{2} S105-S71	Pipe	16.353	Diam/Width:300	
			{a} S71-MD31	Pipe	16.353	Diam/Width:300	Not Applicable
S70	17.866 16.461	Diameter / Length: 1.350	{1} S69-S70	Pipe	16.461	Diam/Width:300	Manhole
E:448436.168 N:117510.374	1.405		{a} S70-S105	Pipe	16.461	Diam/Width:300	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S69	17.787 16.530	Diameter / Length: 1.350	{1} S68-S69	Pipe	16.530	Diam/Width:300	Manhole
E:448443.263 N:117524.653	1.257		{a} S69-S70	Pipe	16.530	Diam/Width:300	Not Applicable
S102	19.111 18.061	Diameter / Length: 1.350					Manhole
E:448434.536 N:117432.565	1.050		{a} S102-S103	Pipe	18.061	Diam/Width:150	Not Applicable
S103	18.699 17.665	Diameter / Length: 1.350	{1} S102-S103	Pipe	17.665	Diam/Width:150	Manhole
E:448433.080 N:117457.258	1.034		{a} S103-S104	Pipe	17.665	Diam/Width:150	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S104	18.310 17.260	Diameter / Length: 1.350	{1} S103-S104	Pipe	17.260	Diam/Width:150	Manhole
E:448432.710 N:117482.619	1.050		{a} S104-S71	Pipe	17.260	Diam/Width:150	Not Applicable
MDSuds feature E	17.157 14.800	Diameter / Length: 2.000	{1} MDFlow Control - MDSuds feature E	Pipe	14.800	Diam/Width:300	Manhole
E:448393.596 N:117213.922	2.357						Not Applicable
MDFlow Control	16.200 15.102	Diameter / Length: 1.200	{1} Basin E Outlet	Pipe	15.102	Diam/Width:300	Manhole
E:448407.206 N:117231.131	1.098		{a} MDFlow Control - MDSuds feature E	Pipe	15.102	Diam/Width:300	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
MD39	17.810 15.973	Diameter / Length: 1.200	{1} MD38-MD39	Pipe	15.973	Diam/Width:225	Manhole
E:448460.641 N:117269.172	1.837		{a} MD39-MD40	Pipe	15.973	Diam/Width:225	Not Applicable
MD38	17.919 16.135	Diameter / Length: 1.200	{1} MD37-MD38	Pipe	16.135	Diam/Width:225	Manhole
E:448476.066 N:117250.345	1.784		{a} MD38-MD39	Pipe	16.135	Diam/Width:225	Not Applicable
MD37	17.562 16.278	Diameter / Length: 1.200					Manhole
E:448493.487 N:117237.929	1.284		{a} MD37-MD38	Pipe	16.278	Diam/Width:225	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
MD40	18.005 15.385	Diameter / Length: 1.200	{1} MD39-MD40	Pipe	15.835	Diam/Width:225	Manhole
E:448442.105 N:117278.363	2.620		{2} MD36-MD40	Pipe	15.385	Diam/Width:675	
			{3} S47-MD40	Pipe	15.685	Diam/Width:375	
			{a} MD40-MD Basin Inlet	Pipe	15.385	Diam/Width:675	Not Applicable
MD36	18.328 15.432	Diameter / Length: 1.500	{1} MD35-MD36	Pipe	15.432	Diam/Width:675	Manhole
E:448422.097 N:117299.721	2.896		{a} MD36-MD40	Pipe	15.432	Diam/Width:675	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
MD35	18.670 15.494	Diameter / Length: 1.200	{1} MD34-MD35	Pipe	15.494	Diam/Width:675	Manhole
E:448410.254 N:117336.030	3.176		{a} MD35-MD36	Pipe	15.494	Diam/Width:675	Not Applicable
MD34	18.958 15.541	Diameter / Length: 1.500	{1} MD33-MD34	Pipe	15.541	Diam/Width:675	Manhole
E:448411.995 N:117365.343	3.417		{a} MD34-MD35	Pipe	15.541	Diam/Width:675	Not Applicable
MD33	19.226 15.598	Diameter / Length: 1.500	{1} MD32-MD33 {2} SWMH70-MD33	Pipe Pipe	15.748 17.372	Diam/Width:525 Diam/Width:450	Manhole
E:448421.522 N:117401.467	3.628		{a} MD33-MD34	Pipe	15.598	Diam/Width:675	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
MD32	18.990 15.810	Diameter / Length: 1.500	{1} MD31-MD32	Pipe	15.810	Diam/Width:525	Manhole
E:448424.628 N:117429.016	3.180		{a} MD32-MD33	Pipe	15.810	Diam/Width:525	Not Applicable
MD30	17.848 16.423	Diameter / Length: 1.200					Manhole
E:448424.223 N:117503.925	1.425		{a} MD30-MD31	Pipe	16.423	Diam/Width:225	Not Applicable
MD31	18.115 15.936	Diameter / Length: 1.500	{1} MD30-MD31 {2} S71-MD31	Pipe Pipe	16.236 16.161	Diam/Width:225 Diam/Width:300	Manhole
E:448420.354 N:117485.986	2.179		{a} MD31-MD32	Pipe	15.936	Diam/Width:525	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
SWMH70	19.500 16.120	Diameter / Length: 1.350	{1} S54-SWMH70	Pipe	16.420	Diam/Width:150	Manhole
E:448437.335 N:117396.983	3.380		{2} S52-SWMH70	Pipe	16.420	Diam/Width:150 Diam/Width:450	
			{3} SWMH69-SWMH70	Pipe	16.120		
			{a} SWMH70-MD33	Pipe	17.474	Diam/Width:450	Not Applicable
S47	18.150 16.490	Diameter / Length: 1.350	{1} S46-S47	Pipe	16.715	Diam/Width:150	Manhole
E:448454.992 N:117285.975	1.660		{2} S48-S47	Pipe	16.565	Diam/Width:300	
			{a} S47-MD40	Pipe	16.490	Diam/Width:375	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S105	18.046 16.407	Diameter / Length: 1.350	{1} S70-S105	Pipe	16.407	Diam/Width:300	Manhole
E:448432.548 N:117498.799	1.639		{a} S105-S71	Pipe	16.407	Diam/Width:300	Not Applicable
SWMH69	20.380 17.210	Diameter / Length: 1.350	{1} SWMH68-SWMH69	Pipe	17.210	Diam/Width:450	Manhole
E:448471.473 N:117383.053	3.170		{2} S51-SWMH69	Pipe	17.510	Diam/Width:150 Diam/Width:300	
			{3} S59-SWMH69	Pipe	17.360	Diam/Width:150	
			{4} S53-SWMH69	Pipe	17.510		
			{a} SWMH69-SWMH70	Pipe	17.210	Diam/Width:450	Not Applicable

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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
SWMH68	21.500 18.020	Diameter / Length: 1.350	{1} SWMH67-SWMH68	Pipe	18.020	Diam/Width:450	Manhole
E:448508.906 N:117369.380	3.480		{2} S50-SWMH68	Pipe	18.320	Diam/Width:150	
			{a} SWMH68-SWMH69	Pipe	18.020	Diam/Width:450	Not Applicable
SWMH67	22.250 19.430	Diameter / Length: 1.350	{1} S49-SWMH67	Pipe	19.730	Diam/Width:150	Manhole
E:448532.953 N:117357.561	2.820		{a} SWMH67-SWMH68	Pipe	19.430	Diam/Width:450	Not Applicable
S49	22.709 21.359	Diameter / Length: 1.350					Manhole
E:448542.337 N:117361.836	1.350		{a} S49-SWMH67	Pipe	21.359	Diam/Width:150	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S108	19.553 18.203	Diameter / Length: 1.350	{1} S107-S108	Pipe	18.203	Diam/Width:150	Manhole
E:448450.726 N:117420.789	1.350		{a} S108-S52	Pipe	18.203	Diam/Width:150	Not Applicable
S107	19.708 18.308	Diameter / Length: 1.350	{1} S106-S107	Pipe	18.308	Diam/Width:150	Manhole
E:448460.250 N:117427.662	1.400		{a} S107-S108	Pipe	18.308	Diam/Width:150	Not Applicable
S106	19.789 18.439	Diameter / Length: 1.350	{1} S60-S106	Pipe	18.439	Diam/Width:150	Manhole
E:448469.926 N:117436.556	1.350		{a} S106-S107	Pipe	18.439	Diam/Width:150	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Inflow Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
48.30m - 1.008	S70		Time of Concentration	0.004	100	10	110	0.005
48.30m - 1.008	S105		Time of Concentration	0.004	100	10	110	0.005
48.30m - 1.008	S105		Time of Concentration	0.005	100	10	110	0.005
48.30m - 1.008	S71		Time of Concentration	0.004	100	10	110	0.005
48.30m - 1.008	S71		Time of Concentration	0.005	100	10	110	0.005
48.30m - 5.000	S102		Time of Concentration	0.004	100	10	110	0.005
48.30m - 5.000	S102		Time of Concentration	0.005	100	10	110	0.005
48.30m - 5.000	S102		Time of Concentration	0.004	100	10	110	0.005
48.30m - 5.000	S102		Time of Concentration	0.005	100	10	110	0.005
48.30m - 5.001	S103		Time of Concentration	0.004	100	10	110	0.005
48.30m - 5.001	S103		Time of Concentration	0.005	100	10	110	0.005
48.30m - 15.000	S4		Time of Concentration	0.004	100	10	110	0.005
48.30m - 15.000	S4		Time of Concentration	0.004	100	10	110	0.005
48.30m - 15.000	S4		Time of Concentration	0.005	100	10	110	0.005
48.30m - 15.000	S4		Time of Concentration	0.004	100	10	110	0.005
48.30m - 15.001	S5		Time of Concentration	0.005	100	10	110	0.005
48.30m - 15.001	S5		Time of Concentration	0.004	100	10	110	0.005
48.30m - 15.001	S5		Time of Concentration	0.005	100	10	110	0.005
48.30m - 22.000	S29		Time of Concentration	0.004	100	10	110	0.005
48.30m - 22.000	S29		Time of Concentration	0.005	100	10	110	0.005

50.83m - 1.003	S106		Time of Concentration	0.005	100	10	110	0.006
50.83m - 1.003	S106		Time of Concentration	0.005	100	10	110	0.005
50.83m - 1.003	S106		Time of Concentration	0.005	100	10	110	0.005
50.83m - 4.000	S64		Time of Concentration	0.005	100	10	110	0.006
50.83m - 4.000	S64		Time of Concentration	0.005	100	10	110	0.005
50.83m - 4.000	S64		Time of Concentration	0.005	100	10	110	0.005
50.83m - 4.000	S64		Time of Concentration	0.005	100	10	110	0.006
50.83m - 4.001	S65		Time of Concentration	0.005	100	10	110	0.005
50.83m - 4.001	S65		Time of Concentration	0.005	100	10	110	0.005
50.83m - 4.001	S65		Time of Concentration	0.005	100	10	110	0.005
50.83m - 4.002	S66		Time of Concentration	0.005	100	10	110	0.006
50.83m - 4.002	S66		Time of Concentration	0.005	100	10	110	0.005
50.83m - 4.002	S66		Time of Concentration	0.005	100	10	110	0.005
50.83m - 4.003	S67		Time of Concentration	0.005	100	10	110	0.006
50.83m - 4.003	S67		Time of Concentration	0.005	100	10	110	0.005
50.83m - 4.003	S67		Time of Concentration	0.005	100	10	110	0.005
50.83m - 7.000	S50		Time of Concentration	0.005	100	10	110	0.006
50.83m - 7.000	S50		Time of Concentration	0.005	100	10	110	0.005
50.83m - 7.000	S50		Time of Concentration	0.005	100	10	110	0.005
50.83m - 7.000	S51		Time of Concentration	0.005	100	10	110	0.006
50.83m - 7.000	S51		Time of Concentration	0.005	100	10	110	0.005

50.83m - 7.000	S51		Time of Concentration	0.005	100	10	110	0.005
50.83m - 8.000	S53		Time of Concentration	0.005	100	10	110	0.006
50.83m - 8.000	S53		Time of Concentration	0.005	100	10	110	0.005
50.83m - 8.000	S53		Time of Concentration	0.005	100	10	110	0.005
50.83m - 8.000	S53		Time of Concentration	0.005	100	10	110	0.006
50.83m - 8.001	S53		Time of Concentration	0.005	100	10	110	0.005
50.83m - 8.001	S53		Time of Concentration	0.005	100	10	110	0.005
50.83m - 9.000	S34		Time of Concentration	0.005	100	10	110	0.006
50.83m - 9.000	S34		Time of Concentration	0.005	100	10	110	0.005
50.83m - 9.000	S34		Time of Concentration	0.005	100	10	110	0.005
50.83m - 9.000	S34		Time of Concentration	0.005	100	10	110	0.005
50.83m - 9.002	S37		Time of Concentration	0.005	100	10	110	0.006
50.83m - 9.002	S37		Time of Concentration	0.005	100	10	110	0.006
50.83m - 9.002	S37		Time of Concentration	0.005	100	10	110	0.005
50.83m - 9.002	S37		Time of Concentration	0.005	100	10	110	0.006
50.83m - 9.003	S38		Time of Concentration	0.005	100	10	110	0.005
50.83m - 9.003	S38		Time of Concentration	0.005	100	10	110	0.005
50.83m - 14.003	S20		Time of Concentration	0.005	100	10	110	0.005
50.83m - 14.006	S25		Time of Concentration	0.005	100	10	110	0.006
50.83m - 14.006	S25		Time of Concentration	0.005	100	10	110	0.005
50.83m - 14.006	S25		Time of Concentration	0.005	100	10	110	0.005

50.83m - 14.007	S31		Time of Concentration	0.005	100	10	110	0.006
50.83m - 14.007	S31		Time of Concentration	0.005	100	10	110	0.005
50.83m - 14.007	S31		Time of Concentration	0.005	100	10	110	0.005
50.83m - 16.000	S9		Time of Concentration	0.005	100	10	110	0.005
50.83m - 16.000	S9		Time of Concentration	0.005	100	10	110	0.006
50.83m - 16.003	S18		Time of Concentration	0.005	100	10	110	0.005
50.83m - 17.000	S10		Time of Concentration	0.005	100	10	110	0.005
50.83m - 17.000	S10		Time of Concentration	0.005	100	10	110	0.005
50.83m - 19.000	S21		Time of Concentration	0.005	100	10	110	0.006
56.55m - 12.000	S42		Time of Concentration	0.006	100	10	110	0.006
56.55m - 12.000	S42		Time of Concentration	0.005	100	10	110	0.006
56.55m - 12.000	S42		Time of Concentration	0.005	100	10	110	0.006
56.55m - 12.000	S42		Time of Concentration	0.005	100	10	110	0.006
56.55m - 12.002	S44		Time of Concentration	0.005	100	10	110	0.006
56.55m - 12.002	S44		Time of Concentration	0.005	100	10	110	0.006
56.55m - 12.003	S45		Time of Concentration	0.006	100	10	110	0.006
56.55m - 12.003	S45		Time of Concentration	0.005	100	10	110	0.006
56.55m - 14.000	S2		Time of Concentration	0.005	100	10	110	0.006
56.55m - 14.000	S2		Time of Concentration	0.005	100	10	110	0.006
56.55m - 14.000	S2		Time of Concentration	0.006	100	10	110	0.006
56.55m - 14.000	S2		Time of Concentration	0.005	100	10	110	0.006

56.55m - 14.000	S2		Time of Concentration	0.005	100	10	110	0.006
56.55m - 14.000	S2		Time of Concentration	0.006	100	10	110	0.006
56.55m - 14.000	S2		Time of Concentration	0.005	100	10	110	0.006
56.55m - 21.000	S26		Time of Concentration	0.006	100	10	110	0.006
56.55m - 21.001	S27		Time of Concentration	0.005	100	10	110	0.006
56.55m - 21.001	S27		Time of Concentration	0.006	100	10	110	0.006
56.55m - 21.002	S28		Time of Concentration	0.005	100	10	110	0.006
56.55m - 21.002	S28		Time of Concentration	0.005	100	10	110	0.006
56.55m - 21.002	S28		Time of Concentration	0.006	100	10	110	0.006
59.38m - 1.000	S56		Time of Concentration	0.006	100	10	110	0.006
59.38m - 1.000	S56		Time of Concentration	0.006	100	10	110	0.007
59.38m - 2.000	S57		Time of Concentration	0.006	100	10	110	0.007
59.38m - 3.000	S62		Time of Concentration	0.006	100	10	110	0.006
59.38m - 3.000	S62		Time of Concentration	0.006	100	10	110	0.007
59.38m - 4.003	S67		Time of Concentration	0.006	100	10	110	0.007
59.38m - 4.003	S67		Time of Concentration	0.006	100	10	110	0.006
59.38m - 7.000	S50		Time of Concentration	0.006	100	10	110	0.007
59.38m - 7.000	S51		Time of Concentration	0.006	100	10	110	0.006
59.38m - 7.001	S52		Time of Concentration	0.006	100	10	110	0.006
59.38m - 8.002	S54		Time of Concentration	0.006	100	10	110	0.006
59.38m - 11.001	S40		Time of Concentration	0.006	100	10	110	0.007

59.38m - 11.001	S40		Time of Concentration	0.006	100	0	100	0.006
59.38m - 11.001	S40		Time of Concentration	0.006	100	10	110	0.006
59.38m - 14.004	S22		Time of Concentration	0.006	100	10	110	0.007
59.38m - 14.004	S22		Time of Concentration	0.006	100	10	110	0.006
59.38m - 14.007	S31		Time of Concentration	0.006	100	10	110	0.007
59.38m - 14.007	S31		Time of Concentration	0.006	100	10	110	0.007
59.38m - 19.000	S21		Time of Concentration	0.006	100	10	110	0.006
59.38m - 20.000	S23		Time of Concentration	0.006	100	10	110	0.007
64.66m - 1.007	S70		Time of Concentration	0.006	100	10	110	0.007
64.66m - 5.000	S102		Time of Concentration	0.006	100	10	110	0.007
64.66m - 5.001	S103		Time of Concentration	0.006	100	10	110	0.007
64.66m - 5.001	S103		Time of Concentration	0.006	100	10	110	0.007
64.66m - 12.001	S43		Time of Concentration	0.006	100	10	110	0.007
64.66m - 12.001	S43		Time of Concentration	0.006	100	10	110	0.007
64.66m - 12.004	S46		Time of Concentration	0.006	100	10	110	0.007
64.66m - 12.004	S46		Time of Concentration	0.006	100	10	110	0.007
64.66m - 14.001	S3		Time of Concentration	0.006	100	10	110	0.007
64.66m - 15.000	S4		Time of Concentration	0.006	100	10	110	0.007
64.66m - 15.002	S6		Time of Concentration	0.006	100	10	110	0.007
64.66m - 21.000	S26		Time of Concentration	0.006	100	10	110	0.007
64.66m - 21.000	S26		Time of Concentration	0.006	100	10	110	0.007

64.66m - 22.000	S29		Time of Concentration	0.006	100	10	110	0.007
64.66m - 22.000	S29		Time of Concentration	0.006	100	10	110	0.007
64.69m - 1.001	S58		Time of Concentration	0.006	100	10	110	0.007
64.69m - 2.000	S57		Time of Concentration	0.006	100	10	110	0.007
64.69m - 2.000	S57		Time of Concentration	0.006	100	10	110	0.007
64.69m - 7.000	S50		Time of Concentration	0.006	100	10	110	0.007
64.69m - 7.000	S51		Time of Concentration	0.006	100	10	110	0.007
64.69m - 7.001	S52		Time of Concentration	0.006	100	10	110	0.007
64.69m - 7.001	S52		Time of Concentration	0.006	100	10	110	0.007
64.69m - 7.001	S52		Time of Concentration	0.006	100	10	110	0.007
64.69m - 8.001	S54		Time of Concentration	0.006	100	10	110	0.007
64.69m - 8.001	S54		Time of Concentration	0.006	100	10	110	0.007
64.69m - 8.001	S54		Time of Concentration	0.006	100	10	110	0.007
80.81m - 1.001	S58		Time of Concentration	0.008	100	10	110	0.009
80.81m - 1.001	S58		Time of Concentration	0.008	100	10	110	0.009
80.81m - 3.000	S62		Time of Concentration	0.008	100	10	110	0.008
80.81m - 3.000	S62		Time of Concentration	0.008	100	10	110	0.009
80.81m - 3.000	S62		Time of Concentration	0.008	100	10	110	0.009
80.81m - 3.000	S62		Time of Concentration	0.008	100	10	110	0.009
80.81m - 4.002	S66		Time of Concentration	0.008	100	0	100	0.008
80.81m - 17.000	S10		Time of Concentration	0.008	100	10	110	0.009

80.81m - 17.000	S10		Time of Concentration	0.008	100	10	110	0.009
80.81m - 18.000	S13		Time of Concentration	0.008	100	10	110	0.009
80.81m - 18.000	S13		Time of Concentration	0.008	100	10	110	0.009
81.82m - 1.000	S56		Time of Concentration	0.008	100	0	100	0.008
81.82m - 1.002	S59		Time of Concentration	0.008	100	0	100	0.008
81.82m - 1.004	S63		Time of Concentration	0.008	100	0	100	0.008
81.82m - 19.000	S21		Time of Concentration	0.008	100	0	100	0.008
81.82m - 20.000	S23		Time of Concentration	0.008	100	10	110	0.009
140.00m - 1.016	MD40		Time of Concentration	0.014	100	0	100	0.014
260.00m - 13.000	MD37		Time of Concentration	0.026	100	0	100	0.026
370.00m - 13.002	MD39		Time of Concentration	0.037	100	0	100	0.037
400.00m - 1.012	MD33		Time of Concentration	0.040	100	0	100	0.040
410.00m - 1.015	MD36		Time of Concentration	0.041	100	0	100	0.041
410.00m - 13.001	MD38		Time of Concentration	0.041	100	0	100	0.041
420.00m - 6.000	MD30		Time of Concentration	0.042	100	0	100	0.042
430.00m - 1.011	MD32		Time of Concentration	0.043	100	0	100	0.043
466.70m - 11.001	S48		Time of Concentration	0.051	100	0	100	0.051
490.00m - 1.014	MD35		Time of Concentration	0.049	100	0	100	0.049
590.00m - 1.013	MD34		Time of Concentration	0.059	100	0	100	0.059
830.00m - 1.010	MD31		Time of Concentration	0.083	100	0	100	0.083
2750.00m - 1.009	S71		Time of Concentration	0.010	100	0	100	0.010

Catchment Area	S9		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (1)	S9		Time of Concentration	0.005	100	0	100	0.005
Catchment Area (2)	S9		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (3)	S10		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (4)	S10		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (5)	S11		Time of Concentration	0.012	100	0	100	0.012
Catchment Area (6)	S10		Time of Concentration	0.018	100	0	100	0.018
Catchment Area (7)	S10		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (8)	S11		Time of Concentration	0.012	100	0	100	0.012
Catchment Area (9)	S11		Time of Concentration	0.021	100	0	100	0.021
Catchment Area (10)	S12		Time of Concentration	0.015	100	0	100	0.015
Catchment Area (11)	S12		Time of Concentration	0.020	100	0	100	0.020
Catchment Area (12)	S20		Time of Concentration	0.018	100	0	100	0.018
Catchment Area (13)	S20		Time of Concentration	0.007	100	0	100	0.007
Catchment Area (14)	S13		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (15)	S13		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (16)	S38		Time of Concentration	0.007	100	0	100	0.007
Catchment Area (17)	S13		Time of Concentration	0.010	100	0	100	0.010
Catchment Area (18)	S13		Time of Concentration	0.010	100	0	100	0.010
Catchment Area (19)	S22		Time of Concentration	0.016	100	0	100	0.016
Catchment Area (20)	S22		Time of Concentration	0.013	100	0	100	0.013

Catchment Area (21)	S21		Time of Concentration	0.007	100	0	100	0.007
Catchment Area (22)	S21		Time of Concentration	0.010	100	0	100	0.010
Catchment Area (23)	S21		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (24)	S21		Time of Concentration	0.013	100	0	100	0.013
Catchment Area (25)	S24		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (26)	S24		Time of Concentration	0.014	100	0	100	0.014
Catchment Area (27)	S24		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (28)	S24		Time of Concentration	0.020	100	0	100	0.020
Catchment Area (29)	S24		Time of Concentration	0.014	100	0	100	0.014
Catchment Area (31)	S23		Time of Concentration	0.013	100	0	100	0.013
Catchment Area (32)	S23		Time of Concentration	0.020	100	0	100	0.020
Catchment Area (33)	S31		Time of Concentration	0.021	100	0	100	0.021
Catchment Area (34)	S31		Time of Concentration	0.011	100	0	100	0.011
Catchment Area (35)	S31		Time of Concentration	0.012	100	0	100	0.012
Catchment Area (36)	S30		Time of Concentration	0.006	100	0	100	0.006
Catchment Area (37)	S31		Time of Concentration	0.018	100	0	100	0.018
Catchment Area (38)	S32		Time of Concentration	0.026	100	0	100	0.026
Catchment Area (39)	S32		Time of Concentration	0.006	100	0	100	0.006
Catchment Area (40)	S32		Time of Concentration	0.017	100	0	100	0.017
Catchment Area (41)	S31		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (42)	S48		Time of Concentration	0.015	100	0	100	0.015

Catchment Area (43)	S36		Time of Concentration	0.013	100	0	100	0.013
Catchment Area (44)	S36		Time of Concentration	0.012	100	0	100	0.012
Catchment Area (45)	S36		Time of Concentration	0.001	100	0	100	0.001
Catchment Area (46)	S41		Time of Concentration	0.013	100	0	100	0.013
Catchment Area (47)	S41		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (48)	S41		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (49)	S41		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (50)	S41		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (51)	S36		Time of Concentration	0.006	100	0	100	0.006
Catchment Area (52)	S41		Time of Concentration	0.007	100	0	100	0.007
Catchment Area (53)	S41		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (54)	S41		Time of Concentration	0.010	100	0	100	0.010
Catchment Area (55)	S36		Time of Concentration	0.012	100	0	100	0.012
Catchment Area (56)	S36		Time of Concentration	0.014	100	0	100	0.014
Catchment Area (57)	S48		Time of Concentration	0.016	100	0	100	0.016
Catchment Area (58)	S48		Time of Concentration	0.012	100	0	100	0.012
Catchment Area (59)	S40		Time of Concentration	0.012	100	0	100	0.012
Catchment Area (60)	S40		Time of Concentration	0.009	100	0	100	0.009
Catchment Area (62)	S41		Time of Concentration	0.011	100	0	100	0.011
Catchment Area (63)	S41		Time of Concentration	0.016	100	0	100	0.016
Catchment Area (64)	S41		Time of Concentration	0.014	100	0	100	0.014

Catchment Area (65)	S41		Time of Concentration	0.016	100	0	100	0.016
Catchment Area (66)	S38		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (67)	S38		Time of Concentration	0.011	100	0	100	0.011
Catchment Area (68)	S38		Time of Concentration	0.017	100	0	100	0.017
Catchment Area (69)	S37		Time of Concentration	0.018	100	0	100	0.018
Catchment Area (70)	S37		Time of Concentration	0.013	100	0	100	0.013
Catchment Area (71)	S37		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (73)	S59		Time of Concentration	0.020	100	0	100	0.020
Catchment Area (74)	S58		Time of Concentration	0.026	100	0	100	0.026
Catchment Area (75)	S59		Time of Concentration	0.026	100	0	100	0.026
Catchment Area (76)	S57		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (77)	S57		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (78)	S56		Time of Concentration	0.025	100	0	100	0.025
Catchment Area (79)	S58		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (80)	S58		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (81)	S56		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (82)	S56		Time of Concentration	0.005	100	0	100	0.005
Catchment Area (83)	S56		Time of Concentration	0.010	100	0	100	0.010
Catchment Area (84)	S56		Time of Concentration	0.024	100	0	100	0.024
Catchment Area (85)	S56		Time of Concentration	0.005	100	0	100	0.005
Catchment Area (86)	S56		Time of Concentration	0.012	100	0	100	0.012

Catchment Area (87)	S56		Time of Concentration	0.019	100	0	100	0.019
Catchment Area (88)	S58		Time of Concentration	0.018	100	0	100	0.018
Catchment Area (89)	S59		Time of Concentration	0.027	100	0	100	0.027
Catchment Area (90)	S60		Time of Concentration	0.007	100	0	100	0.007
Catchment Area (91)	S62		Time of Concentration	0.036	100	0	100	0.036
Catchment Area (92)	S67		Time of Concentration	0.018	100	0	100	0.018
Catchment Area (93)	S67		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (94)	S59		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (95)	S62		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (96)	S62		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (97)	S67		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (98)	S63		Time of Concentration	0.024	100	0	100	0.024
Catchment Area (99)	S63		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (100)	S63		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (101)	S106		Time of Concentration	0.009	100	0	100	0.009
Catchment Area (102)	S61		Time of Concentration	0.017	100	0	100	0.017
Catchment Area (103)	S107		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (104)	S107		Time of Concentration	0.009	100	0	100	0.009
Catchment Area (105)	S52		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (106)	S52		Time of Concentration	0.006	100	0	100	0.006
Catchment Area (107)	S63		Time of Concentration	0.037	100	0	100	0.037

Catchment Area (108)	S63		Time of Concentration	0.014	100	0	100	0.014
Catchment Area (109)	S63		Time of Concentration	0.036	100	0	100	0.036
Catchment Area (110)	S68		Time of Concentration	0.017	100	0	100	0.017
Catchment Area (111)	S68		Time of Concentration	0.009	100	0	100	0.009
Catchment Area (112)	S68		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (113)	S68		Time of Concentration	0.014	100	0	100	0.014
Catchment Area (114)	S69		Time of Concentration	0.005	100	0	100	0.005
Catchment Area (115)	S68		Time of Concentration	0.009	100	0	100	0.009
Catchment Area (116)	S67		Time of Concentration	0.009	100	0	100	0.009
Catchment Area (117)	S66		Time of Concentration	0.005	100	0	100	0.005
Catchment Area (118)	S65		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (119)	S64		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (120)	S64		Time of Concentration	0.011	100	0	100	0.011
Catchment Area (121)	S57		Time of Concentration	0.009	100	0	100	0.009
Catchment Area (122)	S49		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (123)	S38		Time of Concentration	0.007	100	0	100	0.007
Catchment Area (124)	S39		Time of Concentration	0.007	100	0	100	0.007
Catchment Area (125)	S39		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (126)	S40		Time of Concentration	0.004	100	0	100	0.004
TOTAL		**0.0**		**2.782**				**2.864**

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Network Design Criteria Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Flow Options

Peak Flow Calculation	(UK) Modified Rational Method
Min. Time of Entry (mins)	5
Max. Travel Time (mins)	30

Pipe Options

Lock Slope Options	None
Design Options	Minimise Excavation
Design Level	Level Soffits
Min. Cover Depth (m)	1.200
Min. Slope (1:X)	500.00
Max. Slope (1:X)	40.00
Min. Velocity (m/s)	1.0
Max. Velocity (m/s)	3.0
Use Flow Restriction	☐
Reduce Channel Depths	☐

Pipe Size Library

Default

Add. Increment (mm)	75
Max. Diameter (mm)	0

Diameter (mm)	Min. Slope (1:X)	Max. Slope (1:X)
100	0.00	0.00
150	0.00	0.00

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Manhole Options

Apply Offset	☐

Manhole Size Library

Default

Diameter / Width

Connection (mm)	Diameter / Length (m)	Width (m)
0	1.200	0.000
375	1.350	0.000
500	1.500	0.000
0	0.000	0.000

Additional Sizing

Connection (mm)	900
Diameter / Length (m)	0.900
Width (m)	0.000

Depth

Depth (m)	Diameter / Length (m)	Width (m)
0.000	1.050	0.000
1.500	1.200	0.000

Benching Requirements

Landing Width (mm)	500
Benching Width (mm)	225

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Outfall Details Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Outfalls

Outfall	Outfall Type	Fixed Surcharged Level (m)	Level Curve
MDSuds feature E	Free Discharge		

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Name	Junction Type	Easting (m)	Northing (m)	Cover Level (m)	Depth (m)	Invert Level (m)	Chamber Shape	Diameter (m)	Lock
S78	Manhole	448475.664	117518.484	18.278	2.113	16.165	Circular	1.350	None
S79	Manhole	448449.343	117532.216	17.947	1.870	16.077	Circular	1.350	None
S95	Manhole	448501.694	117594.042	18.632	2.030	16.602	Circular	1.500	None
S94	Manhole	448543.305	117593.852	19.118	2.118	17.000	Circular	1.500	None
S93	Manhole	448568.911	117581.256	19.513	1.090	18.423	Circular	1.350	None
S92	Manhole	448580.810	117580.948	19.727	1.096	18.632	Circular	1.350	None
S91	Manhole	448591.699	117588.771	19.957	1.165	18.792	Circular	1.350	None
S90	Manhole	448604.268	117598.018	20.202	1.063	19.139	Circular	1.350	None
S89	Manhole	448624.409	117602.280	20.547	1.050	19.497	Circular	1.350	None
S88	Manhole	448585.757	117619.845	20.127	1.050	19.078	Circular	1.350	None
S87	Manhole	448581.068	117643.252	20.287	1.050	19.237	Circular	1.350	None
S86	Manhole	448621.998	117627.145	20.535	1.050	19.485	Circular	1.350	None
S74	Manhole	448490.398	117552.325	18.662	1.397	17.265	Circular	1.350	None
S73	Manhole	448511.639	117544.215	19.201	1.171	18.030	Circular	1.350	None
S84	Manhole	448542.730	117613.108	19.486	1.995	17.491	Circular	1.350	None
S82	Manhole	448532.511	117664.300	18.889	1.050	17.839	Circular	1.350	None
S81	Manhole	448600.079	117678.222	19.832	1.050	18.782	Circular	1.350	None
S83	Manhole	448564.218	117617.319	19.996	1.289	18.707	Circular	1.350	None
S85	Manhole	448545.223	117600.343	19.237	1.846	17.391	Circular	1.350	None
S72	Manhole	448533.133	117544.189	19.749	1.050	18.699	Circular	1.350	None
S77	Manhole	448503.193	117506.292	18.650	2.134	16.516	Circular	1.350	None
S76	Manhole	448530.241	117493.464	19.106	2.416	16.690	Circular	1.350	None
S75	Manhole	448536.550	117508.031	20.047	1.508	18.539	Circular	1.350	None
S97	Manhole	448467.348	117641.386	17.465	1.667	15.798	Circular	1.350	None
S96	Manhole	448476.600	117593.959	18.007	1.645	16.362	Circular	1.500	None
S80	Manhole	448449.446	117538.883	17.965	1.910	16.055	Circular	1.350	None
S99	Manhole	448466.824	117581.334	18.021	1.050	16.971	Circular	1.350	None
S100	Manhole	448460.306	117563.257	18.135	1.293	16.843	Circular	1.350	None
S101	Manhole	448453.318	117540.845	18.095	1.415	16.680	Circular	1.350	None
MDS	Manhole	448395.699	117638.237	15.500	0.762	14.738	Circular	0.000	None
SFlow MDControl	Manhole	448408.609	117621.434	16.508	1.208	15.300	Circular	1.200	None
MDS43	Manhole	448445.062	117555.701	17.854	2.173	15.681	Circular	1.350	None
MDS41	Manhole	448433.362	117529.368	17.598	1.425	16.173	Circular	1.200	None
MDS42	Manhole	448439.877	117544.047	17.699	1.933	15.766	Circular	1.350	None

MDS46	Manhole	448465.090	117687.523	16.916	1.137	15.779	Circular	1.200	None
MDS47	Manhole	448441.327	117659.310	16.710	1.115	15.595	Circular	1.500	None
MDS44	Manhole	448457.041	117594.290	17.763	1.425	16.338	Circular	1.200	None
MDS45	Manhole	448452.601	117657.131	17.080	1.462	15.618	Circular	1.500	None

Inlets

Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S78	Inlet	S74-S78 Catchment Area (48) Catchment Area (47) Catchment Area (56)	(None)	No Restriction
	Inlet (1)	S77-S78 Catchment Area (54) Catchment Area (72)	(None)	No Restriction
S79	Inlet	S78-S79 Catchment Area (127)	(None)	No Restriction
S95	Inlet	59.38m - 1.005 64.69m - 1.004 64.69m - 1.004 64.69m - 1.004	(None)	No Restriction
	Inlet (1)	622.45m - 1.005	(None)	No Restriction
	Inlet (2)	Catchment Area (3) S94-S95	(None)	No Restriction
	Inlet (3)	Catchment Area (39)	(None)	No Restriction
	Inlet	S85-S94 Catchment Area (19)	(None)	No Restriction

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S94	Inlet (1)	Catchment Area (4) Catchment Area (6) Catchment Area (16) S93-S94 Catchment Area (49) Catchment Area (51)	(None)	No Restriction
S93	Inlet	59.38m - 3.004 S92-S93 Catchment Area (7)	(None)	No Restriction
	Inlet (1)	59.38m - 3.004	(None)	No Restriction
	Inlet (2)	Catchment Area (13) Catchment Area (17) Catchment Area (18)	(None)	No Restriction
S92	Inlet	S91-S92 Catchment Area (8)	(None)	No Restriction
	Inlet (1)	Catchment Area (5)	(None)	No Restriction
S91	Inlet	S90-S91 Catchment Area (9) Catchment Area (11)	(None)	No Restriction
	Inlet (1)	S88-S91 Catchment Area (14) Catchment Area (15) Catchment Area (25)	(None)	No Restriction
S90	Inlet	S89-S90 Catchment Area (10) Catchment Area (12)	(None)	No Restriction
	Inlet (1)	59.38m - 5.001 Catchment Area (20)	(None)	No Restriction

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Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S89	Inlet	59.38m - 5.000 80.81m - 5.000 80.81m - 5.000 Catchment Area (21)	(None)	No Restriction
S88	Inlet	50.83m - 3.001	(None)	No Restriction
	Inlet (1)	S87-S88 Catchment Area (24) Catchment Area (27)	(None)	No Restriction
	Inlet (2)	S86-S88 Catchment Area (26)	(None)	No Restriction
S87	Inlet	50.83m - 4.000	(None)	No Restriction
S86	Inlet	50.83m - 3.000 50.83m - 3.000 50.83m - 3.000 50.83m - 3.000	(None)	No Restriction
	Inlet (1)	Catchment Area (41)	(None)	No Restriction
S74	Inlet	S73-S74 Catchment Area (46)	(None)	No Restriction
	Inlet (1)	Catchment Area (40) Catchment Area (55)	(None)	No Restriction
S73	Inlet	59.38m - 8.001 59.38m - 8.001	(None)	No Restriction
	Inlet (1)	S72-S73 Catchment Area (45)	(None)	No Restriction
	Inlet	S82-S84 Catchment Area (36)	(None)	No Restriction

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Junctions Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S84	Inlet (1)	S83-S84 Catchment Area (37) Catchment Area (38)	(None)	No Restriction
S82	Inlet	59.38m - 1.001 59.38m - 1.001 90.01m - 1.001 584.67m - 1.001	(None)	No Restriction
	Inlet (1)	S81-S82 Catchment Area (30) Catchment Area (31) Catchment Area (32) Catchment Area (33) Catchment Area (35)	(None)	No Restriction
S81	Inlet	90.01m - 1.000 73.04m - 1.000 73.04m - 1.000 90.00m - 1.000 86.92m - 1.000 Catchment Area (34)	(None)	No Restriction
	Inlet (1)	Catchment Area (42)	(None)	No Restriction
S83	Inlet	50.83m - 2.000 50.83m - 2.000 50.83m - 2.000 50.83m - 2.000	(None)	No Restriction

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Report Details: Type: Junctions Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
	Inlet (1)	Catchment Area (23) Catchment Area (29) Catchment Area (28)	(None)	No Restriction
S85	Inlet	S84-S85 Catchment Area (22)	(None)	No Restriction
S72	Inlet	59.38m - 8.000 50.83m - 8.000 50.83m - 8.000 50.83m - 8.000	(None)	No Restriction
	Inlet (1)	Catchment Area (44)	(None)	No Restriction
S77	Inlet	50.83m - 9.002 50.83m - 9.002 50.83m - 9.002 50.83m - 9.002 S76-S77 Catchment Area (53)	(None)	No Restriction
S76	Inlet	S75-S76 Catchment Area (52) Catchment Area (57) Catchment Area (61) Catchment Area (58) Catchment Area (30) (1)	(None)	No Restriction
S75	Inlet	80.81m - 9.000 80.81m - 9.000	(None)	No Restriction
	Inlet (1)	Catchment Area (43) Catchment Area (50)	(None)	No Restriction
S97	Inlet	S96-S97	(None)	No Restriction

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Junctions Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
S96	Inlet	S95-S96 Catchment Area (2)	(None)	No Restriction
S80	Inlet	S79-S80 S101-S80	(None)	No Restriction
S99	Inlet	64.66m - 10.000 64.66m - 10.000 48.30m - 10.000 48.30m - 10.000	(None)	No Restriction
S100	Inlet	48.30m - 10.001 48.30m - 10.001 48.30m - 10.001 48.30m - 10.001 S99-S100	(None)	No Restriction
S101	Inlet	S100-S101 64.66m - 10.002	(None)	No Restriction
MDS	Inlet	SFlow MDControl -MDS	(None)	No Restriction
SFlow MDControl	Inlet	Basin A Outlet	(None)	No Restriction
MDS43	Inlet	60.00m - 8.007 MDS42-MDS43	(None)	No Restriction
MDS41	Inlet	580.00m - 11.000	(None)	No Restriction
MDS42	Inlet	MDS41-MDS42 260.00m - 8.006 S80-MDS42	(None)	No Restriction
MDS46	Inlet	980.00m - 7.000	(None)	No Restriction
MDS47	Inlet	MDS46-MDS47 MDS45-MDS47	(None)	No Restriction

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Report Details: Type: Junctions Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Junction	Inlet Name	Incoming Item(s)	Bypass Destination	Capacity Type
MDS44	Inlet	1050.00m - 6.000	(None)	No Restriction
	Inlet (1)	Catchment Area Catchment Area (1)	(None)	No Restriction
MDS45	Inlet	MDS44-MDS45 150.00m - 1.008 S97-MDS45	(None)	No Restriction

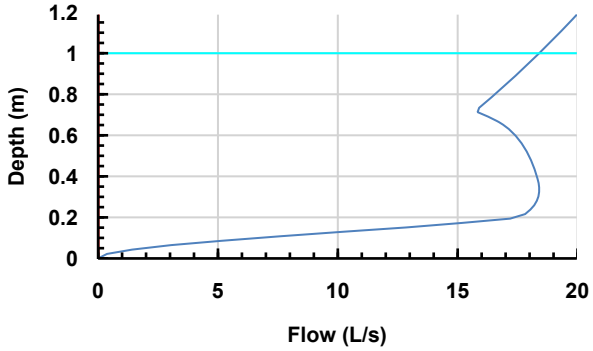
Outlets

Junction	Outlet Name	Outgoing Connection	Outlet Type
S78	Outlet	S78-S79	Free Discharge
S79	Outlet	S79-S80	Free Discharge
S95	Outlet	S95-S96	Free Discharge
S94	Outlet	S94-S95	Free Discharge
S93	Outlet	S93-S94	Free Discharge
S92	Outlet	S92-S93	Free Discharge
S91	Outlet	S91-S92	Free Discharge
S90	Outlet	S90-S91	Free Discharge
S89	Outlet	S89-S90	Free Discharge
S88	Outlet	S88-S91	Free Discharge
S87	Outlet	S87-S88	Free Discharge
S86	Outlet	S86-S88	Free Discharge
S74	Outlet	S74-S78	Free Discharge
S73	Outlet	S73-S74	Free Discharge
S84	Outlet	S84-S85	Free Discharge
S82	Outlet	S82-S84	Free Discharge
S81	Outlet	S81-S82	Free Discharge
S83	Outlet	S83-S84	Free Discharge
S85	Outlet	S85-S94	Free Discharge
S72	Outlet	S72-S73	Free Discharge
S77	Outlet	S77-S78	Free Discharge
S76	Outlet	S76-S77	Free Discharge
S75	Outlet	S75-S76	Free Discharge
S97	Outlet	S97-MDS45	Free Discharge
S96	Outlet	S96-S97	Free Discharge
S80	Outlet	S80-MDS42	Free Discharge
S99	Outlet	S99-S100	Free Discharge
S100	Outlet	S100-S101	Free Discharge

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Junctions Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Junction	Outlet Name	Outgoing Connection	Outlet Type
S101	Outlet	S101-S80	Free Discharge
SFlow MDControl	Outlet	SFlow MDControl -MDS	Hydro-Brake®

Invert Level (m)	15.300
Design Depth (m)	1.000
Design Flow (L/s)	18.4
Objective	Minimise Upstream Storage Requirements
Application	Surface Water Only
Sump Available	☑
Unit Reference	SFF-0190-1840-1000-1780



MDS43	Outlet	MDS43-MDSSuds feat A	Free Discharge
MDS41	Outlet	MDS41-MDS42	Free Discharge
MDS42	Outlet	MDS42-MDS43	Free Discharge
MDS46	Outlet	MDS46-MDS47	Free Discharge
MDS47	Outlet	MDS47-MDSSuds feat A	Free Discharge
MDS44	Outlet	MDS44-MDS45	Free Discharge
MDS45	Outlet	MDS45-MDS47	Free Discharge

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		



Basin A

Type : Pond

Dimensions

Exceedance Level (m)	16.610
Depth (m)	1.209
Base Level (m)	15.401
Freeboard (mm)	0
Initial Depth (m)	0.000
Porosity (%)	100
Average Slope (1:X)	5.97
Total Volume (m³)	1221.800

Depth (m)	Area (m²)	Volume (m³)
0.000	633.927	0.000
1.209	1441.803	1221.800

Inlets

Inlet

Inlet Type	Point Inflow
Incoming Item(s)	MDS43-MDSSuds feat A
Bypass Destination	(None)
Capacity Type	No Restriction

Inlet (1)

Inlet Type	Point Inflow
Incoming Item(s)	MDS47-MDSSuds feat A
Bypass Destination	(None)
Capacity Type	No Restriction

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Outlets

Outlet

Outgoing Connection	Basin A Outlet
Outlet Type	Free Discharge

Advanced

Perimeter	Circular
Length (m)	64.588
Friction Scheme	Manning's n
n	0.001

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Manhole Schedule Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S78	18.278 16.165	Diameter / Length: 1.350	{1} S74-S78	Pipe	16.315	Diam/Width:225	Manhole
E:448475.664 N:117518.484	2.113		{2} S77-S78	Pipe	16.315	Diam/Width:225	
			{a} S78-S79	Pipe	16.165	Diam/Width:375	Not Applicable
S79	17.947 16.077	Diameter / Length: 1.350	{1} S78-S79	Pipe	16.077	Diam/Width:375	Manhole
E:448449.343 N:117532.216	1.870		{a} S79-S80	Pipe	16.077	Diam/Width:375	Not Applicable
S95	18.632 16.602	Diameter / Length: 1.500	{1} S94-S95	Pipe	16.602	Diam/Width:525	Manhole
E:448501.694 N:117594.042	2.030		{a} S95-S96	Pipe	16.602	Diam/Width:525	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Manhole Schedule Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S94	19.118 17.000	Diameter / Length: 1.500	{1} S85-S94	Pipe	17.150	Diam/Width:375	Manhole
E:448543.305 N:117593.852	2.118		{2} S93-S94	Pipe	17.922	Diam/Width:225	
			{a} S94-S95	Pipe	17.000	Diam/Width:525	Not Applicable
S93	19.513 18.423	Diameter / Length: 1.350	{1} S92-S93	Pipe	18.423	Diam/Width:225	Manhole
E:448568.911 N:117581.256	1.090		{a} S93-S94	Pipe	18.423	Diam/Width:225	Not Applicable
S92	19.727 18.632	Diameter / Length: 1.350	{1} S91-S92	Pipe	18.632	Diam/Width:225	Manhole
E:448580.810 N:117580.948	1.096		{a} S92-S93	Pipe	18.632	Diam/Width:225	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S91	19.957 18.792	Diameter / Length: 1.350	{1} S90-S91	Pipe	18.867	Diam/Width:150	Manhole
E:448591.699 N:117588.771	1.165		{2} S88-S91	Pipe	18.867	Diam/Width:150	
			{a} S91-S92	Pipe	18.792	Diam/Width:225	Not Applicable
S90	20.202 19.139	Diameter / Length: 1.350	{1} S89-S90	Pipe	19.139	Diam/Width:150	Manhole
E:448604.268 N:117598.018	1.063		{a} S90-S91	Pipe	19.139	Diam/Width:150	Not Applicable
S89	20.547 19.497	Diameter / Length: 1.350					Manhole
E:448624.409 N:117602.280	1.050		{a} S89-S90	Pipe	19.497	Diam/Width:150	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S88	20.127 19.078	Diameter / Length: 1.350	{1} S87-S88	Pipe	19.078	Diam/Width:150	Manhole
E:448585.757 N:117619.845	1.050		{2} S86-S88	Pipe	19.078	Diam/Width:150	
			{a} S88-S91	Pipe	19.078	Diam/Width:150	Not Applicable
S87	20.287 19.237	Diameter / Length: 1.350					Manhole
E:448581.068 N:117643.252	1.050		{a} S87-S88	Pipe	19.237	Diam/Width:150	Not Applicable
S86	20.535 19.485	Diameter / Length: 1.350					Manhole
E:448621.998 N:117627.145	1.050		{a} S86-S88	Pipe	19.485	Diam/Width:150	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S74	18.662 17.265	Diameter / Length: 1.350	{1} S73-S74	Pipe	17.340	Diam/Width:150	Manhole
E:448490.398 N:117552.325	1.397		{a} S74-S78	Pipe	17.265	Diam/Width:225	Not Applicable
S73	19.201 18.030	Diameter / Length: 1.350	{1} S72-S73	Pipe	18.030	Diam/Width:150	Manhole
E:448511.639 N:117544.215	1.171		{a} S73-S74	Pipe	18.030	Diam/Width:150	Not Applicable
S84	19.486 17.491	Diameter / Length: 1.350	{1} S82-S84 {2} S83-S84	Pipe Pipe	17.566 18.136	Diam/Width:300 Diam/Width:150	Manhole
E:448542.730 N:117613.108	1.995		{a} S84-S85	Pipe	17.491	Diam/Width:375	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S82	18.889 17.839	Diameter / Length: 1.350	{1} S81-S82	Pipe	17.989	Diam/Width:150	Manhole
E:448532.511 N:117664.300	1.050		{a} S82-S84	Pipe	17.839	Diam/Width:300	Not Applicable
S81	19.832 18.782	Diameter / Length: 1.350					Manhole
E:448600.079 N:117678.222	1.050		{a} S81-S82	Pipe	18.782	Diam/Width:150	Not Applicable
S83	19.996 18.707	Diameter / Length: 1.350					Manhole
E:448564.218 N:117617.319	1.289		{a} S83-S84	Pipe	18.707	Diam/Width:150	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S85	19.237 17.391	Diameter / Length: 1.350	{1} S84-S85	Pipe	17.391	Diam/Width:375	Manhole
E:448545.223 N:117600.343	1.846		{a} S85-S94	Pipe	17.391	Diam/Width:375	Not Applicable
S72	19.749 18.699	Diameter / Length: 1.350					Manhole
E:448533.133 N:117544.189	1.050		{a} S72-S73	Pipe	18.699	Diam/Width:150	Not Applicable
S77	18.650 16.516	Diameter / Length: 1.350	{1} S76-S77	Pipe	16.516	Diam/Width:225	Manhole
E:448503.193 N:117506.292	2.134		{a} S77-S78	Pipe	16.516	Diam/Width:225	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S76	19.106 16.690	Diameter / Length: 1.350	{1} S75-S76	Pipe	16.765	Diam/Width:150	Manhole
E:448530.241 N:117493.464	2.416		{a} S76-S77	Pipe	16.690	Diam/Width:225	Not Applicable
S75	20.047 18.539	Diameter / Length: 1.350					Manhole
E:448536.550 N:117508.031	1.508		{a} S75-S76	Pipe	18.539	Diam/Width:150	Not Applicable
S97	17.465 15.798	Diameter / Length: 1.350	{1} S96-S97	Pipe	15.798	Diam/Width:525	Manhole
E:448467.348 N:117641.386	1.667		{a} S97-MDS45	Pipe	15.798	Diam/Width:525	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S96	18.007 16.362	Diameter / Length: 1.500	{1} S95-S96	Pipe	16.362	Diam/Width:525	Manhole
E:448476.600 N:117593.959	1.645		{a} S96-S97	Pipe	16.362	Diam/Width:525	Not Applicable
S80	17.965 16.055	Diameter / Length: 1.350	{1} S79-S80 {2} S101-S80	Pipe Pipe	16.055 16.425	Diam/Width:375 Diam/Width:150	Manhole
E:448449.446 N:117538.883	1.910		{a} S80-MDS42	Pipe	16.055	Diam/Width:375	Not Applicable
S99	18.021 16.971	Diameter / Length: 1.350					Manhole
E:448466.824 N:117581.334	1.050		{a} S99-S100	Pipe	16.971	Diam/Width:150	Not Applicable

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Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
S100	18.135 16.843	Diameter / Length: 1.350	{1} S99-S100	Pipe	16.843	Diam/Width:150	Manhole
E:448460.306 N:117563.257	1.293		{a} S100-S101	Pipe	16.843	Diam/Width:150	Not Applicable
S101	18.095 16.680	Diameter / Length: 1.350	{1} S100-S101	Pipe	16.680	Diam/Width:150	Manhole
E:448453.318 N:117540.845	1.415		{a} S101-S80	Pipe	16.680	Diam/Width:150	Not Applicable
MDS	15.500 14.738	Diameter / Length: 0.000	{1} SFlow MDControl - MDS	Pipe	14.738	Diam/Width:225	Manhole
E:448395.699 N:117638.237	0.762						Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
SFlow MDControl	16.508 15.300	Diameter / Length: 1.200	{1} Basin A Outlet	Pipe	15.300	Diam/Width:225	Manhole
E:448408.609 N:117621.434	1.208		{a} SFlow MDControl - MDS	Pipe	15.300	Diam/Width:225	Not Applicable
MDS43	17.854 15.681	Diameter / Length: 1.350	{1} MDS42-MDS43	Pipe	15.681	Diam/Width:450	Manhole
E:448445.062 N:117555.701	2.173		{a} MDS43-MDSSuds feat A	Pipe	15.681	Diam/Width:450	Not Applicable
MDS41	17.598 16.173	Diameter / Length: 1.200					Manhole
E:448433.362 N:117529.368	1.425		{a} MDS41-MDS42	Pipe	16.173	Diam/Width:225	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Manhole Schedule Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
MDS42	17.699 15.766	Diameter / Length: 1.350	{1} MDS41-MDS42	Pipe	15.991	Diam/Width:225	Manhole
E:448439.877 N:117544.047	1.933		{2} S80-MDS42	Pipe	15.841	Diam/Width:375	
			{a} MDS42-MDS43	Pipe	15.766	Diam/Width:450	Not Applicable
MDS46	16.916 15.779	Diameter / Length: 1.200					Manhole
E:448465.090 N:117687.523	1.137		{a} MDS46-MDS47	Pipe	15.779	Diam/Width:300	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
MDS47	16.710 15.595	Diameter / Length: 1.500	{1} MDS46-MDS47	Pipe	15.595	Diam/Width:300	Manhole
E:448441.327 N:117659.310	1.115		{2} MDS45-MDS47	Pipe	15.595	Diam/Width:525	
			{a} MDS47-MDSSuds feat A	Pipe	15.595	Diam/Width:525	Not Applicable
MDS44	17.763 16.338	Diameter / Length: 1.200					Manhole
E:448457.041 N:117594.290	1.425		{a} MDS44-MDS45	Pipe	16.338	Diam/Width:225	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Manhole Schedule Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Name	Cover Level (m) Invert Level (m)	Manhole Size (m)	Connection Details				Type
Coordinates (m)	Depth (m)		Incoming Connections	Connection Type	Connection Invert (m)	Connection Size (mm)	Junction Type
			Outgoing Connections				Cover
MDS45	17.080 15.618	Diameter / Length: 1.500	{1} MDS44-MDS45	Pipe	15.618	Diam/Width:225	Manhole
E:448452.601 N:117657.131	1.462		{2} S97-MDS45	Pipe	15.618	Diam/Width:525	
			{a} MDS45-MDS47	Pipe	15.618	Diam/Width:525	Not Applicable

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Inflow Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Inflow Label	Connected To	Flow (L/s)	Runoff Method	Area (ha)	Percentage Impervious (%)	Urban Creep (%)	Adjusted Percentage Impervious (%)	Area Analysed (ha)
48.30m - 10.000	S99		Time of Concentration	0.004	100	10	110	0.005
48.30m - 10.000	S99		Time of Concentration	0.005	100	10	110	0.005
48.30m - 10.001	S100		Time of Concentration	0.004	100	10	110	0.005
48.30m - 10.001	S100		Time of Concentration	0.005	100	10	110	0.005
48.30m - 10.001	S100		Time of Concentration	0.004	100	10	110	0.005
48.30m - 10.001	S100		Time of Concentration	0.005	100	10	110	0.005
50.83m - 2.000	S83		Time of Concentration	0.005	100	10	110	0.005
50.83m - 2.000	S83		Time of Concentration	0.005	100	10	110	0.005
50.83m - 2.000	S83		Time of Concentration	0.005	100	10	110	0.005
50.83m - 2.000	S83		Time of Concentration	0.005	100	10	110	0.005
50.83m - 3.000	S86		Time of Concentration	0.005	100	10	110	0.006
50.83m - 3.000	S86		Time of Concentration	0.005	100	10	110	0.005
50.83m - 3.000	S86		Time of Concentration	0.005	100	10	110	0.005
50.83m - 3.000	S86		Time of Concentration	0.005	100	10	110	0.005
50.83m - 3.001	S88		Time of Concentration	0.005	100	10	110	0.006
50.83m - 4.000	S87		Time of Concentration	0.005	100	10	110	0.006
50.83m - 8.000	S72		Time of Concentration	0.005	100	10	110	0.006
50.83m - 8.000	S72		Time of Concentration	0.005	100	10	110	0.005
50.83m - 8.000	S72		Time of Concentration	0.005	100	10	110	0.005
50.83m - 9.002	S77		Time of Concentration	0.005	100	10	110	0.006

50.83m - 9.002	S77		Time of Concentration	0.005	100	10	110	0.005
50.83m - 9.002	S77		Time of Concentration	0.005	100	10	110	0.005
50.83m - 9.002	S77		Time of Concentration	0.005	100	10	110	0.005
59.38m - 1.001	S82		Time of Concentration	0.006	100	10	110	0.007
59.38m - 1.001	S82		Time of Concentration	0.006	100	10	110	0.006
59.38m - 1.005	S95		Time of Concentration	0.006	100	10	110	0.006
59.38m - 3.004	S93		Time of Concentration	0.006	100	10	110	0.007
59.38m - 3.004	S93		Time of Concentration	0.006	100	10	110	0.006
59.38m - 5.000	S89		Time of Concentration	0.006	100	10	110	0.007
59.38m - 5.001	S90		Time of Concentration	0.006	100	10	110	0.007
59.38m - 8.000	S72		Time of Concentration	0.006	100	10	110	0.007
59.38m - 8.001	S73		Time of Concentration	0.006	100	10	110	0.007
59.38m - 8.001	S73		Time of Concentration	0.006	100	10	110	0.006
60.00m - 8.007	MDS43		Time of Concentration	0.006	100	0	100	0.006
64.66m - 10.000	S99		Time of Concentration	0.006	100	10	110	0.007
64.66m - 10.000	S99		Time of Concentration	0.006	100	10	110	0.007
64.66m - 10.002	S101		Time of Concentration	0.006	100	10	110	0.007
64.69m - 1.004	S95		Time of Concentration	0.006	100	10	110	0.007
64.69m - 1.004	S95		Time of Concentration	0.006	100	10	110	0.007
64.69m - 1.004	S95		Time of Concentration	0.006	100	10	110	0.007
73.04m - 1.000	S81		Time of Concentration	0.007	100	10	110	0.008

73.04m - 1.000	S81		Time of Concentration	0.007	100	10	110	0.008
80.81m - 5.000	S89		Time of Concentration	0.008	100	10	110	0.009
80.81m - 5.000	S89		Time of Concentration	0.008	100	10	110	0.009
80.81m - 9.000	S75		Time of Concentration	0.008	100	10	110	0.009
80.81m - 9.000	S75		Time of Concentration	0.008	100	10	110	0.009
86.92m - 1.000	S81		Time of Concentration	0.009	100	10	110	0.010
90.00m - 1.000	S81		Time of Concentration	0.009	100	10	110	0.010
90.01m - 1.000	S81		Time of Concentration	0.009	100	10	110	0.010
90.01m - 1.001	S82		Time of Concentration	0.009	100	10	110	0.010
150.00m - 1.008	MDS45		Time of Concentration	0.015	100	0	100	0.015
260.00m - 8.006	MDS42		Time of Concentration	0.026	100	0	100	0.026
580.00m - 11.000	MDS41		Time of Concentration	0.058	100	0	100	0.058
584.67m - 1.001	S82		Time of Concentration	0.059	100	0	100	0.059
622.45m - 1.005	S95		Time of Concentration	0.062	100	0	100	0.062
980.00m - 7.000	MDS46		Time of Concentration	0.098	100	0	100	0.098
1050.00m - 6.000	MDS44		Time of Concentration	0.105	100	0	100	0.105
Catchment Area	MDS44		Time of Concentration	0.007	100	0	100	0.007
Catchment Area (1)	MDS44		Time of Concentration	0.009	100	0	100	0.009
Catchment Area (2)	S96		Time of Concentration	0.026	100	0	100	0.026
Catchment Area (3)	S95		Time of Concentration	0.032	100	0	100	0.032
Catchment Area (4)	S94		Time of Concentration	0.053	100	0	100	0.053

Catchment Area (5)	S92		Time of Concentration	0.033	100	0	100	0.033
Catchment Area (6)	S94		Time of Concentration	0.017	100	0	100	0.017
Catchment Area (7)	S93		Time of Concentration	0.012	100	0	100	0.012
Catchment Area (8)	S92		Time of Concentration	0.013	100	0	100	0.013
Catchment Area (9)	S91		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (10)	S90		Time of Concentration	0.021	100	0	100	0.021
Catchment Area (11)	S91		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (12)	S90		Time of Concentration	0.015	100	0	100	0.015
Catchment Area (13)	S93		Time of Concentration	0.006	100	0	100	0.006
Catchment Area (14)	S91		Time of Concentration	0.006	100	0	100	0.006
Catchment Area (15)	S91		Time of Concentration	0.007	100	0	100	0.007
Catchment Area (16)	S94		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (17)	S93		Time of Concentration	0.007	100	0	100	0.007
Catchment Area (18)	S93		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (19)	S94		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (20)	S90		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (21)	S89		Time of Concentration	0.006	100	0	100	0.006
Catchment Area (22)	S85		Time of Concentration	0.023	100	0	100	0.023
Catchment Area (23)	S83		Time of Concentration	0.015	100	0	100	0.015
Catchment Area (24)	S88		Time of Concentration	0.019	100	0	100	0.019
Catchment Area (25)	S91		Time of Concentration	0.008	100	0	100	0.008

Catchment Area (26)	S88		Time of Concentration	0.006	100	0	100	0.006
Catchment Area (27)	S88		Time of Concentration	0.015	100	0	100	0.015
Catchment Area (28)	S83		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (29)	S83		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (30)	S82		Time of Concentration	0.032	100	0	100	0.032
Catchment Area (30) (1)	S76		Time of Concentration	0.012	100	0	100	0.012
Catchment Area (31)	S82		Time of Concentration	0.050	100	0	100	0.050
Catchment Area (32)	S82		Time of Concentration	0.004	100	10	110	0.004
Catchment Area (33)	S82		Time of Concentration	0.009	100	0	100	0.009
Catchment Area (34)	S81		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (35)	S82		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (36)	S84		Time of Concentration	0.024	100	0	100	0.024
Catchment Area (37)	S84		Time of Concentration	0.002	100	0	100	0.002
Catchment Area (38)	S84		Time of Concentration	0.007	100	0	100	0.007
Catchment Area (39)	S95		Time of Concentration	0.193	100	0	100	0.193
Catchment Area (40)	S74		Time of Concentration	0.019	100	0	100	0.019
Catchment Area (41)	S86		Time of Concentration	0.006	100	0	100	0.006
Catchment Area (42)	S81		Time of Concentration	0.011	100	0	100	0.011
Catchment Area (43)	S75		Time of Concentration	0.032	100	0	100	0.032
Catchment Area (44)	S72		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (45)	S73		Time of Concentration	0.020	100	0	100	0.020

Catchment Area (46)	S74		Time of Concentration	0.024	100	0	100	0.024
Catchment Area (47)	S78		Time of Concentration	0.029	100	0	100	0.029
Catchment Area (48)	S78		Time of Concentration	0.014	100	0	100	0.014
Catchment Area (49)	S94		Time of Concentration	0.007	100	0	100	0.007
Catchment Area (50)	S75		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (51)	S94		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (52)	S76		Time of Concentration	0.005	100	0	100	0.005
Catchment Area (53)	S77		Time of Concentration	0.004	100	0	100	0.004
Catchment Area (54)	S78		Time of Concentration	0.006	100	0	100	0.006
Catchment Area (55)	S74		Time of Concentration	0.007	100	0	100	0.007
Catchment Area (56)	S78		Time of Concentration	0.015	100	0	100	0.015
Catchment Area (57)	S76		Time of Concentration	0.003	100	0	100	0.003
Catchment Area (58)	S76		Time of Concentration	0.008	100	0	100	0.008
Catchment Area (61)	S76		Time of Concentration	0.012	100	0	100	0.012
Catchment Area (72)	S78		Time of Concentration	0.019	100	0	100	0.019
Catchment Area (127)	S79		Time of Concentration	0.013	100	0	100	0.013
TOTAL		**0.0**		**1.716**				**1.745**

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Network Design Criteria Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Flow Options

Peak Flow Calculation	(UK) Modified Rational Method
Min. Time of Entry (mins)	5
Max. Travel Time (mins)	30

Pipe Options

Lock Slope Options	None
Design Options	Minimise Excavation
Design Level	Level Soffits
Min. Cover Depth (m)	1.200
Min. Slope (1:X)	500.00
Max. Slope (1:X)	40.00
Min. Velocity (m/s)	1.0
Max. Velocity (m/s)	3.0
Use Flow Restriction	☐
Reduce Channel Depths	☐

Pipe Size Library

Default

Add. Increment (mm)	75
Max. Diameter (mm)	0

Diameter (mm)	Min. Slope (1:X)	Max. Slope (1:X)
100	0.00	0.00
150	0.00	0.00

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Network Design Criteria Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Manhole Options

Apply Offset	☐

Manhole Size Library

Default

Diameter / Width

Connection (mm)	Diameter / Length (m)	Width (m)
0	1.200	0.000
375	1.350	0.000
500	1.500	0.000
0	0.000	0.000

Additional Sizing

Connection (mm)	900
Diameter / Length (m)	0.900
Width (m)	0.000

Depth

Depth (m)	Diameter / Length (m)	Width (m)
0.000	1.050	0.000
1.500	1.200	0.000

Benching Requirements

Landing Width (mm)	500
Benching Width (mm)	225

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Outfall Details Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Outfalls

Outfall	Outfall Type	Fixed Surcharged Level (m)	Level Curve
MDS	Free Discharge		

Quobleigh Breach Parcel of Development:	Date:		
One Horton Heath Hampshire	22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Title: Rainfall Analysis Criteria	Motion: 84 North Street Guildford GU1 4AU		

Runoff Type	Dynamic
Output Interval (mins)	5
Time Step	Shortest
Urban Creep	Use Catchment Values
Junction Flood Risk Margin (mm)	0
Perform No Discharge Analysis	☐

Rainfall

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Title: Rainfall Analysis Criteria	Motion: 84 North Street Guildford GU1 4AU		

FEH

Type: FEH

Site Location	GB 448927 117350 SU 48927 17350
Rainfall Version	2013
Data Type	Point
Summer	☑
Winter	☑

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0.000
30.0	30.000
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

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S32	FEH: 2 years: +0 %: 30 mins: Winter	17.000	15.553	15.747	0.194	85.6	0.343	0.000	85.3	79.405	OK
S31	FEH: 2 years: +0 %: 15 mins: Winter	17.491	15.651	15.860	0.209	88.0	0.370	0.000	79.4	56.220	OK
S25	FEH: 2 years: +0 %: 15 mins: Winter	18.017	15.756	15.967	0.211	66.3	0.302	0.000	60.1	42.786	OK
S24	FEH: 2 years: +0 %: 15 mins: Winter	17.930	15.836	16.056	0.221	70.5	0.316	0.000	63.7	41.709	OK
S22	FEH: 2 years: +0 %: 15 mins: Winter	17.526	15.960	16.150	0.190	57.2	0.272	0.000	52.2	33.253	OK
S18	FEH: 2 years: +0 %: 15 mins: Winter	17.652	16.058	16.217	0.159	30.8	0.227	0.000	27.7	16.412	OK
S12	FEH: 2 years: +0 %: 15 mins: Winter	17.490	16.138	16.258	0.120	25.1	0.171	0.000	23.1	12.815	OK
S11	FEH: 2 years: +0 %: 15 mins: Winter	17.361	16.205	16.315	0.110	20.8	0.158	0.000	19.3	10.138	OK
S9	FEH: 2 years: +0 %: 15 mins: Winter	17.409	16.269	16.322	0.053	3.7	0.076	0.000	3.1	1.729	OK
S35	FEH: 2 years: +0 %: 15 mins: Winter	21.772	20.422	20.448	0.026	3.4	0.038	0.000	3.2	1.608	OK
S37	FEH: 2 years: +0 %: 15 mins: Winter	20.321	18.318	18.393	0.075	21.4	0.085	0.000	20.5	10.365	OK
S38	FEH: 2 years: +0 %: 15 mins: Winter	19.643	17.856	17.951	0.095	30.7	0.107	0.000	30.0	15.076	OK
S48	FEH: 2 years: +0 %: 15 mins: Winter	18.125	16.605	16.857	0.252	70.3	0.360	0.000	66.8	34.365	OK
S36	FEH: 2 years: +0 %: 15 mins: Winter	19.649	18.599	18.688	0.090	9.7	0.129	0.000	9.0	4.464	OK
S39	FEH: 2 years: +0 %: 15 mins: Winter	19.299	18.249	18.272	0.023	1.6	0.033	0.000	1.5	0.718	OK
S40	FEH: 2 years: +0 %: 15 mins: Winter	19.143	17.830	17.886	0.056	8.8	0.081	0.000	8.4	4.073	OK
S41	FEH: 2 years: +0 %: 15 mins: Winter	18.948	17.364	17.468	0.104	56.0	0.148	0.000	54.9	27.317	OK

S34	FEH: 2 years: +0 %: 15 mins: Winter	22.508	21.458	21.492	0.034	3.5	0.048	0.000	3.4	1.614	OK
S54	FEH: 2 years: +0 %: 15 mins: Winter	19.935	18.585	18.608	0.023	4.5	0.033	0.000	4.4	2.059	OK
S53	FEH: 2 years: +0 %: 15 mins: Summer	20.749	19.399	19.424	0.025	5.0	0.036	0.000	5.0	2.177	OK
S29	FEH: 2 years: +0 %: 15 mins: Winter	18.557	17.507	17.561	0.054	4.0	0.077	0.000	3.7	1.828	OK
S30	FEH: 2 years: +0 %: 15 mins: Winter	18.717	17.330	17.373	0.043	12.1	0.062	0.000	11.6	6.089	OK
S59	FEH: 2 years: +0 %: 15 mins: Winter	20.588	18.832	18.927	0.095	48.7	0.136	0.000	47.4	24.293	OK
S62	FEH: 2 years: +0 %: 15 mins: Winter	19.983	18.633	18.714	0.081	14.8	0.116	0.000	13.7	6.856	OK
S67	FEH: 2 years: +0 %: 15 mins: Winter	19.851	18.501	18.601	0.100	22.6	0.143	0.000	20.1	11.299	OK
S51	FEH: 2 years: +0 %: 15 mins: Summer	21.081	19.731	19.755	0.024	4.6	0.035	0.000	4.5	1.984	OK
S52	FEH: 2 years: +0 %: 15 mins: Winter	19.898	18.005	18.044	0.039	12.6	0.056	0.000	12.4	6.326	OK
S50	FEH: 2 years: +0 %: 15 mins: Winter	21.912	20.562	20.586	0.024	4.8	0.034	0.000	4.7	2.228	OK
S66	FEH: 2 years: +0 %: 15 mins: Winter	20.223	18.873	18.971	0.098	12.7	0.141	0.000	11.5	6.179	OK
S65	FEH: 2 years: +0 %: 15 mins: Winter	20.373	19.023	19.105	0.082	8.5	0.117	0.000	8.1	4.037	OK
S64	FEH: 2 years: +0 %: 15 mins: Winter	20.425	19.075	19.143	0.068	5.7	0.098	0.000	5.5	2.647	OK
S68	FEH: 2 years: +0 %: 15 mins: Winter	18.787	17.362	17.487	0.125	65.4	0.178	0.000	63.5	33.760	OK
S63	FEH: 2 years: +0 %: 15 mins: Winter	19.089	17.664	17.809	0.145	38.7	0.208	0.000	36.6	18.484	OK
S61	FEH: 2 years: +0 %: 15 mins: Winter	19.592	18.167	18.206	0.039	2.8	0.056	0.000	2.6	1.324	OK
S60	FEH: 2 years: +0 %: 15 mins: Winter	20.441	19.016	19.035	0.019	1.2	0.027	0.000	1.1	0.532	OK
S57	FEH: 2 years: +0 %: 15 mins: Winter	21.708	20.358	20.398	0.040	5.9	0.057	0.000	5.6	2.720	OK
S56	FEH: 2 years: +0 %: 15 mins: Winter	20.682	19.182	19.288	0.106	20.9	0.151	0.000	19.8	9.665	OK
S58	FEH: 2 years: +0 %: 15 mins: Winter	21.365	19.007	19.159	0.152	38.1	0.218	0.000	34.9	18.188	OK

S10	FEH: 2 years: +0 %: 15 mins: Winter	17.122	16.307	16.408	0.102	10.9	0.145	0.000	10.4	5.023	OK
S13	FEH: 2 years: +0 %: 15 mins: Winter	17.272	16.222	16.285	0.063	7.0	0.090	0.000	6.8	3.247	OK
S23	FEH: 2 years: +0 %: 15 mins: Winter	17.532	16.482	16.530	0.048	8.0	0.069	0.000	7.8	3.676	OK
S46	FEH: 2 years: +0 %: 15 mins: Winter	18.234	17.070	17.135	0.065	11.0	0.092	0.000	10.5	5.665	OK
S45	FEH: 2 years: +0 %: 15 mins: Winter	18.346	17.226	17.300	0.074	9.2	0.107	0.000	8.8	4.629	OK
S44	FEH: 2 years: +0 %: 15 mins: Winter	18.554	17.455	17.520	0.065	7.6	0.092	0.000	7.2	3.719	OK
S43	FEH: 2 years: +0 %: 15 mins: Winter	18.708	17.641	17.698	0.057	6.0	0.081	0.000	5.7	2.840	OK
S42	FEH: 2 years: +0 %: 15 mins: Winter	18.927	17.877	17.921	0.044	3.9	0.063	0.000	3.7	1.808	OK
S33	FEH: 2 years: +0 %: 30 mins: Winter	16.363	15.500	15.643	0.143	85.3	0.254	0.000	85.2	79.333	OK
S21	FEH: 2 years: +0 %: 15 mins: Winter	17.167	16.070	16.175	0.106	8.6	0.151	0.000	7.1	3.996	OK
S28	FEH: 2 years: +0 %: 15 mins: Winter	19.084	17.825	17.886	0.061	7.8	0.088	0.000	7.4	3.796	OK
S27	FEH: 2 years: +0 %: 15 mins: Winter	19.180	17.980	18.035	0.055	5.1	0.079	0.000	4.8	2.438	OK
S26	FEH: 2 years: +0 %: 15 mins: Winter	19.159	18.109	18.152	0.044	3.3	0.063	0.000	3.1	1.522	OK
S2	FEH: 2 years: +0 %: 15 mins: Winter	18.924	17.874	17.926	0.052	6.8	0.074	0.000	6.5	3.175	OK
S3	FEH: 2 years: +0 %: 15 mins: Winter	18.271	16.972	17.019	0.047	7.7	0.067	0.000	7.4	3.716	OK
S8	FEH: 2 years: +0 %: 15 mins: Winter	17.930	16.439	16.524	0.085	14.4	0.122	0.000	13.5	7.489	OK
S20	FEH: 2 years: +0 %: 15 mins: Winter	17.644	16.021	16.202	0.181	46.1	0.259	0.000	43.2	26.145	OK
S6	FEH: 2 years: +0 %: 15 mins: Winter	17.911	16.540	16.617	0.078	7.5	0.111	0.000	7.0	3.796	OK
S5	FEH: 2 years: +0 %: 15 mins: Winter	17.755	16.645	16.718	0.073	6.8	0.105	0.000	6.4	3.261	OK
S4	FEH: 2 years: +0 %: 15 mins: Winter	17.613	16.763	16.819	0.056	4.5	0.080	0.000	4.3	2.077	OK
S71	FEH: 2 years: +0 %: 15 mins: Winter	18.234	16.353	16.514	0.161	69.1	0.231	0.000	66.9	41.153	OK

S70	FEH: 2 years: +0 %: 15 mins: Winter	17.866	16.461	16.691	0.230	61.4	0.329	0.000	58.6	34.973	OK
S69	FEH: 2 years: +0 %: 15 mins: Winter	17.787	16.530	16.770	0.240	64.4	0.344	0.000	59.5	34.093	OK
S102	FEH: 2 years: +0 %: 15 mins: Winter	19.111	18.061	18.105	0.045	4.5	0.064	0.000	4.4	2.111	OK
S103	FEH: 2 years: +0 %: 15 mins: Winter	18.699	17.665	17.733	0.067	8.3	0.096	0.000	7.8	3.935	OK
S104	FEH: 2 years: +0 %: 15 mins: Winter	18.310	17.260	17.296	0.036	7.8	0.051	0.000	7.6	3.930	OK
MDSuds feature E	FEH: 2 years: +0 %: 240 mins: Winter	17.157	14.800	14.893	0.093	27.5	0.000	0.000	27.5	447.188	OK
MDFlow Control	FEH: 2 years: +0 %: 240 mins: Winter	16.200	15.102	15.417	0.315	27.5	0.356	0.000	27.5	447.294	Surcharged
MD39	FEH: 2 years: +0 %: 15 mins: Winter	17.810	15.973	16.071	0.098	16.3	0.111	0.000	15.0	7.922	OK
MD38	FEH: 2 years: +0 %: 15 mins: Winter	17.919	16.135	16.211	0.076	10.9	0.086	0.000	10.2	5.113	OK
MD37	FEH: 2 years: +0 %: 15 mins: Winter	17.562	16.278	16.325	0.047	4.3	0.053	0.000	4.1	1.985	OK
MD40	FEH: 2 years: +0 %: 15 mins: Winter	18.005	15.385	15.699	0.314	208.4	0.355	0.000	219.4	143.960	OK
MD36	FEH: 2 years: +0 %: 15 mins: Winter	18.328	15.432	15.770	0.338	155.3	0.597	0.000	165.2	95.396	OK
MD35	FEH: 2 years: +0 %: 15 mins: Winter	18.670	15.494	15.831	0.337	142.6	0.381	0.000	153.4	92.976	OK
MD34	FEH: 2 years: +0 %: 15 mins: Winter	18.958	15.541	15.874	0.332	128.7	0.587	0.000	140.4	89.745	OK
MD33	FEH: 2 years: +0 %: 30 mins: Winter	19.226	15.598	15.919	0.321	138.1	0.566	0.000	137.1	117.076	OK
MD32	FEH: 2 years: +0 %: 30 mins: Winter	18.990	15.810	16.026	0.215	77.1	0.380	0.000	76.7	71.007	OK
MD30	FEH: 2 years: +0 %: 15 mins: Winter	17.848	16.423	16.479	0.056	6.9	0.063	0.000	6.6	3.205	OK
MD31	FEH: 2 years: +0 %: 15 mins: Winter	18.115	15.936	16.164	0.228	87.2	0.404	0.000	79.7	50.670	OK
SWMH70	FEH: 2 years: +0 %: 30 mins: Winter	19.500	16.120	17.630	1.510	57.0	2.161	0.000	57.0	42.867	OK
S47	FEH: 2 years: +0 %: 15 mins: Winter	18.150	16.490	16.601	0.111	77.3	0.159	0.000	76.2	40.016	OK
S105	FEH: 2 years: +0 %: 15 mins: Winter	18.046	16.407	16.612	0.205	60.3	0.293	0.000	58.2	35.710	OK

SWMH69	FEH: 2 years: +0 %: 30 mins: Winter	20.380	17.210	17.640	0.430	45.0	0.615	0.000	45.0	38.653	OK
SWMH68	FEH: 2 years: +0 %: 15 mins: Winter	21.500	18.020	18.049	0.029	4.9	0.042	0.000	4.5	2.389	OK
SWMH67	FEH: 2 years: +0 %: 15 mins: Winter	22.250	19.430	19.435	0.005	0.2	0.007	0.000	0.2	0.115	OK
S49	FEH: 2 years: +0 %: 15 mins: Winter	22.709	21.359	21.365	0.006	0.2	0.009	0.000	0.2	0.116	OK
S108	FEH: 2 years: +0 %: 15 mins: Winter	19.553	18.203	18.272	0.069	7.1	0.099	0.000	6.7	3.627	OK
S107	FEH: 2 years: +0 %: 15 mins: Winter	19.708	18.308	18.381	0.073	7.5	0.104	0.000	7.1	3.644	OK
S106	FEH: 2 years: +0 %: 15 mins: Winter	19.789	18.439	18.495	0.055	5.2	0.079	0.000	4.9	2.415	OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

FEH: 30 years: Increase Rainfall (%): +30: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S32	FEH: 30 years: +30 %: 15 mins: Winter	17.000	15.553	15.892	0.339	234.3	0.600	0.000	226.2	165.577	OK
S31	FEH: 30 years: +30 %: 15 mins: Winter	17.491	15.651	16.034	0.383	218.9	0.676	0.000	212.1	155.536	OK
S25	FEH: 30 years: +30 %: 15 mins: Winter	18.017	15.756	16.231	0.475	143.9	0.680	0.000	141.6	118.418	Surcharged
S24	FEH: 30 years: +30 %: 30 mins: Winter	17.930	15.836	16.390	0.555	144.4	0.794	0.000	143.4	153.696	Surcharged
S22	FEH: 30 years: +30 %: 30 mins: Winter	17.526	15.960	16.528	0.568	111.8	0.813	0.000	110.5	122.438	Surcharged
S18	FEH: 30 years: +30 %: 30 mins: Winter	17.652	16.058	16.590	0.532	55.9	0.761	0.000	56.4	60.267	Surcharged
S12	FEH: 30 years: +30 %: 30 mins: Winter	17.490	16.138	16.607	0.468	45.1	0.670	0.000	44.0	46.984	Surcharged
S11	FEH: 30 years: +30 %: 30 mins: Winter	17.361	16.205	16.615	0.410	37.1	0.587	0.000	34.5	37.136	Surcharged
S9	FEH: 30 years: +30 %: 30 mins: Winter	17.409	16.269	16.616	0.347	6.9	0.497	0.000	7.8	6.343	OK
S35	FEH: 30 years: +30 %: 15 mins: Winter	21.772	20.422	20.466	0.044	9.3	0.063	0.000	9.0	4.449	OK
S37	FEH: 30 years: +30 %: 15 mins: Winter	20.321	18.318	18.458	0.140	56.0	0.159	0.000	54.3	28.523	OK
S38	FEH: 30 years: +30 %: 15 mins: Winter	19.643	17.856	18.058	0.203	82.3	0.229	0.000	77.4	41.462	OK
S48	FEH: 30 years: +30 %: 15 mins: Winter	18.125	16.605	17.272	0.667	176.6	0.954	0.000	175.4	94.596	Surcharged
S36	FEH: 30 years: +30 %: 15 mins: Winter	19.649	18.599	19.109	0.511	26.6	0.731	0.000	21.4	12.304	Surcharged
S39	FEH: 30 years: +30 %: 15 mins: Winter	19.299	18.249	18.287	0.038	4.3	0.054	0.000	4.1	1.963	OK
S40	FEH: 30 years: +30 %: 15 mins: Winter	19.143	17.830	17.937	0.107	24.1	0.153	0.000	22.7	11.204	OK
S41	FEH: 30 years: +30 %: 15 mins: Winter	18.948	17.364	17.650	0.286	148.6	0.409	0.000	134.3	75.097	OK

S34	FEH: 30 years: +30 %: 15 mins: Winter	22.508	21.458	21.516	0.058	9.6	0.083	0.000	9.3	4.456	OK
S54	FEH: 30 years: +30 %: 15 mins: Winter	19.935	18.585	18.624	0.039	12.3	0.056	0.000	12.2	5.656	OK
S53	FEH: 30 years: +30 %: 15 mins: Winter	20.749	19.399	19.441	0.042	14.5	0.060	0.000	14.4	6.708	OK
S29	FEH: 30 years: +30 %: 15 mins: Winter	18.557	17.507	17.605	0.098	10.8	0.140	0.000	10.3	5.006	OK
S30	FEH: 30 years: +30 %: 15 mins: Winter	18.717	17.330	17.406	0.076	33.5	0.109	0.000	32.6	16.701	OK
S59	FEH: 30 years: +30 %: 15 mins: Winter	20.588	18.832	18.998	0.166	127.2	0.238	0.000	124.4	67.212	OK
S62	FEH: 30 years: +30 %: 15 mins: Winter	19.983	18.633	19.588	0.955	40.7	1.367	0.000	28.0	18.709	Surcharged
S67	FEH: 30 years: +30 %: 15 mins: Winter	19.851	18.501	19.565	1.064	42.5	1.523	0.000	35.4	31.256	Surcharged
S51	FEH: 30 years: +30 %: 15 mins: Winter	21.081	19.731	19.771	0.040	13.3	0.057	0.000	13.2	6.122	OK
S52	FEH: 30 years: +30 %: 15 mins: Winter	19.898	18.005	18.073	0.068	33.6	0.098	0.000	33.2	17.469	OK
S50	FEH: 30 years: +30 %: 15 mins: Winter	21.912	20.562	20.602	0.040	13.3	0.057	0.000	13.1	6.134	OK
S66	FEH: 30 years: +30 %: 15 mins: Winter	20.223	18.873	20.125	1.252	20.6	1.792	0.000	20.4	17.149	Surcharged
S65	FEH: 30 years: +30 %: 15 mins: Winter	20.373	19.023	20.244	1.221	15.9	1.747	0.000	12.9	11.125	Surcharged
S64	FEH: 30 years: +30 %: 15 mins: Winter	20.425	19.075	20.259	1.184	15.7	1.694	0.000	7.6	7.279	Surcharged
S68	FEH: 30 years: +30 %: 15 mins: Winter	18.787	17.362	17.920	0.558	131.4	0.799	0.000	124.2	92.938	Surcharged
S63	FEH: 30 years: +30 %: 15 mins: Winter	19.089	17.664	18.551	0.887	89.2	1.269	0.000	74.9	50.981	Surcharged
S61	FEH: 30 years: +30 %: 15 mins: Winter	19.592	18.167	18.552	0.385	11.7	0.551	0.000	11.0	3.894	Surcharged
S60	FEH: 30 years: +30 %: 15 mins: Winter	20.441	19.016	19.047	0.031	3.2	0.045	0.000	3.1	1.471	OK
S57	FEH: 30 years: +30 %: 15 mins: Winter	21.708	20.358	20.426	0.068	16.1	0.097	0.000	15.9	7.425	OK
S56	FEH: 30 years: +30 %: 15 mins: Winter	20.682	19.182	19.396	0.214	57.4	0.306	0.000	50.2	26.563	OK
S58	FEH: 30 years: +30 %: 15 mins: Winter	21.365	19.007	19.345	0.338	100.8	0.484	0.000	89.2	50.010	Surcharged

S10	FEH: 30 years: +30 %: 15 mins: Winter	17.122	16.307	16.838	0.531	29.8	0.760	0.000	24.5	13.780	Surcharged
S13	FEH: 30 years: +30 %: 30 mins: Winter	17.272	16.222	16.666	0.444	12.8	0.635	0.000	11.6	11.845	Surcharged
S23	FEH: 30 years: +30 %: 15 mins: Winter	17.532	16.482	16.589	0.107	21.8	0.153	0.000	18.8	10.091	OK
S46	FEH: 30 years: +30 %: 15 mins: Winter	18.234	17.070	17.193	0.123	27.5	0.176	0.000	26.7	15.630	OK
S45	FEH: 30 years: +30 %: 15 mins: Winter	18.346	17.226	17.426	0.200	22.6	0.286	0.000	21.3	12.775	Surcharged
S44	FEH: 30 years: +30 %: 15 mins: Winter	18.554	17.455	17.614	0.159	21.5	0.228	0.000	17.1	10.250	Surcharged
S43	FEH: 30 years: +30 %: 15 mins: Winter	18.708	17.641	17.751	0.110	16.6	0.157	0.000	16.2	7.808	OK
S42	FEH: 30 years: +30 %: 15 mins: Winter	18.927	17.877	17.956	0.080	10.8	0.114	0.000	10.4	4.966	OK
S33	FEH: 30 years: +30 %: 15 mins: Winter	16.363	15.500	15.752	0.252	226.2	0.446	0.000	220.9	165.144	OK
S21	FEH: 30 years: +30 %: 15 mins: Winter	17.167	16.070	16.691	0.621	23.8	0.889	0.000	18.9	10.989	Surcharged
S28	FEH: 30 years: +30 %: 15 mins: Winter	19.084	17.825	17.945	0.120	21.6	0.171	0.000	20.5	10.428	OK
S27	FEH: 30 years: +30 %: 15 mins: Winter	19.180	17.980	18.086	0.106	14.2	0.152	0.000	13.5	6.688	OK
S26	FEH: 30 years: +30 %: 15 mins: Winter	19.159	18.109	18.187	0.078	9.0	0.112	0.000	8.7	4.168	OK
S2	FEH: 30 years: +30 %: 15 mins: Winter	18.924	17.874	17.968	0.094	18.9	0.135	0.000	18.4	8.663	OK
S3	FEH: 30 years: +30 %: 15 mins: Winter	18.271	16.972	17.194	0.222	21.6	0.318	0.000	17.4	10.189	Surcharged
S8	FEH: 30 years: +30 %: 15 mins: Winter	17.930	16.439	17.138	0.698	25.0	0.999	0.000	26.4	20.600	Surcharged
S20	FEH: 30 years: +30 %: 30 mins: Winter	17.644	16.021	16.575	0.554	85.7	0.793	0.000	86.5	96.065	Surcharged
S6	FEH: 30 years: +30 %: 15 mins: Winter	17.911	16.540	17.230	0.690	12.0	0.988	0.000	13.4	10.420	Surcharged
S5	FEH: 30 years: +30 %: 15 mins: Winter	17.755	16.645	17.286	0.641	13.9	0.918	0.000	10.1	8.927	Surcharged
S4	FEH: 30 years: +30 %: 15 mins: Winter	17.613	16.763	17.307	0.544	12.3	0.778	0.000	6.9	5.681	Surcharged
S71	FEH: 30 years: +30 %: 15 mins: Winter	18.234	16.353	16.761	0.408	149.6	0.584	0.000	145.8	113.508	Surcharged

S70	FEH: 30 years: +30 %: 15 mins: Winter	17.866	16.461	17.210	0.749	126.4	1.072	0.000	126.4	96.485	Surcharged
S69	FEH: 30 years: +30 %: 15 mins: Winter	17.787	16.530	17.453	0.923	126.5	1.321	0.000	120.9	94.013	Surcharged
S102	FEH: 30 years: +30 %: 15 mins: Winter	19.111	18.061	18.139	0.078	12.5	0.112	0.000	12.1	5.768	OK
S103	FEH: 30 years: +30 %: 15 mins: Winter	18.699	17.665	17.801	0.136	22.9	0.195	0.000	21.1	10.769	OK
S104	FEH: 30 years: +30 %: 15 mins: Summer	18.310	17.260	17.318	0.058	20.1	0.082	0.000	20.0	9.597	OK
MDSuds feature E	FEH: 30 years: +30 %: 480 mins: Winter	17.157	14.800	14.901	0.101	32.3	0.000	0.000	32.3	1385.128	OK
MDFlow Control	FEH: 30 years: +30 %: 240 mins: Winter	16.200	15.102	15.738	0.636	32.4	0.719	0.000	32.3	765.424	Surcharged
MD39	FEH: 30 years: +30 %: 15 mins: Winter	17.810	15.973	16.175	0.202	45.1	0.229	0.000	41.3	21.524	OK
MD38	FEH: 30 years: +30 %: 15 mins: Winter	17.919	16.135	16.277	0.142	30.0	0.160	0.000	28.4	14.032	OK
MD37	FEH: 30 years: +30 %: 15 mins: Winter	17.562	16.278	16.357	0.079	11.8	0.089	0.000	11.4	5.450	OK
MD40	FEH: 30 years: +30 %: 30 mins: Winter	18.005	15.385	15.983	0.598	585.7	0.676	0.000	583.8	557.917	OK
MD36	FEH: 30 years: +30 %: 30 mins: Winter	18.328	15.432	16.067	0.634	392.5	1.121	0.000	391.1	382.619	OK
MD35	FEH: 30 years: +30 %: 30 mins: Winter	18.670	15.494	16.155	0.661	382.0	0.748	0.000	380.1	373.651	OK
MD34	FEH: 30 years: +30 %: 30 mins: Winter	18.958	15.541	16.230	0.689	370.1	1.217	0.000	367.2	361.130	Surcharged
MD33	FEH: 30 years: +30 %: 30 mins: Winter	19.226	15.598	16.310	0.712	355.7	1.257	0.000	352.2	345.146	Surcharged
MD32	FEH: 30 years: +30 %: 30 mins: Winter	18.990	15.810	16.372	0.562	188.9	0.992	0.000	184.9	197.957	Surcharged
MD30	FEH: 30 years: +30 %: 15 mins: Winter	17.848	16.423	16.521	0.098	19.0	0.111	0.000	18.6	8.773	OK
MD31	FEH: 30 years: +30 %: 30 mins: Winter	18.115	15.936	16.470	0.534	181.4	0.944	0.000	175.9	186.227	Surcharged
SWMH70	FEH: 30 years: +30 %: 15 mins: Winter	19.500	16.120	17.820	1.700	205.1	2.433	0.000	201.0	100.172	OK
S47	FEH: 30 years: +30 %: 15 mins: Winter	18.150	16.490	16.686	0.196	202.0	0.281	0.000	201.6	109.889	OK
S105	FEH: 30 years: +30 %: 15 mins: Winter	18.046	16.407	16.983	0.576	127.6	0.825	0.000	131.1	98.570	Surcharged

SWMH69	FEH: 30 years: +30 %: 15 mins: Winter	20.380	17.210	17.939	0.729	165.0	1.043	0.000	159.8	83.805	Surcharged
SWMH68	FEH: 30 years: +30 %: 15 mins: Winter	21.500	18.020	18.068	0.048	13.7	0.069	0.000	13.0	6.491	OK
SWMH67	FEH: 30 years: +30 %: 15 mins: Winter	22.250	19.430	19.439	0.009	0.7	0.013	0.000	0.6	0.309	OK
S49	FEH: 30 years: +30 %: 15 mins: Winter	22.709	21.359	21.369	0.010	0.7	0.015	0.000	0.7	0.311	OK
S108	FEH: 30 years: +30 %: 15 mins: Winter	19.553	18.203	18.334	0.132	18.3	0.188	0.000	17.5	10.030	OK
S107	FEH: 30 years: +30 %: 15 mins: Winter	19.708	18.308	18.495	0.187	19.5	0.268	0.000	18.3	10.047	Surcharged
S106	FEH: 30 years: +30 %: 15 mins: Winter	19.789	18.439	18.546	0.107	14.3	0.153	0.000	12.2	6.659	OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

FEH: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S32	FEH: 100 years: +40 %: 15 mins: Winter	17.000	15.553	15.952	0.399	303.1	0.705	0.000	290.4	222.706	OK
S31	FEH: 100 years: +40 %: 15 mins: Winter	17.491	15.651	16.119	0.468	285.7	0.827	0.000	273.2	209.347	OK
S25	FEH: 100 years: +40 %: 15 mins: Winter	18.017	15.756	16.464	0.709	189.2	1.014	0.000	184.0	159.421	Surcharged
S24	FEH: 100 years: +40 %: 30 mins: Winter	17.930	15.836	16.734	0.898	187.2	1.285	0.000	186.7	208.802	Surcharged
S22	FEH: 100 years: +40 %: 30 mins: Winter	17.526	15.960	16.958	0.998	142.4	1.428	0.000	141.9	166.349	Surcharged
S18	FEH: 100 years: +40 %: 30 mins: Winter	17.652	16.058	17.052	0.994	68.5	1.422	0.000	69.7	81.853	Surcharged
S12	FEH: 100 years: +40 %: 30 mins: Winter	17.490	16.138	17.072	0.934	51.9	1.336	0.000	55.7	63.816	Surcharged
S11	FEH: 100 years: +40 %: 30 mins: Winter	17.361	16.205	17.080	0.876	42.4	1.253	0.000	46.7	50.715	Surcharged
S9	FEH: 100 years: +40 %: 30 mins: Winter	17.409	16.269	17.081	0.812	12.2	1.162	0.000	8.7	8.885	Surcharged
S35	FEH: 100 years: +40 %: 15 mins: Winter	21.772	20.422	20.473	0.051	12.6	0.073	0.000	12.3	5.980	OK
S37	FEH: 100 years: +40 %: 15 mins: Winter	20.321	18.318	18.955	0.637	70.0	0.721	0.000	59.7	38.462	Surcharged
S38	FEH: 100 years: +40 %: 15 mins: Winter	19.643	17.856	18.695	0.839	97.4	0.949	0.000	88.4	55.912	Surcharged
S48	FEH: 100 years: +40 %: 15 mins: Winter	18.125	16.605	17.513	0.908	224.2	1.299	0.000	219.8	127.517	Surcharged
S36	FEH: 100 years: +40 %: 15 mins: Winter	19.649	18.599	19.642	1.043	35.8	1.493	0.000	24.4	16.590	Surcharged
S39	FEH: 100 years: +40 %: 15 mins: Winter	19.299	18.249	18.333	0.083	8.5	0.119	0.000	1.8	2.737	OK
S40	FEH: 100 years: +40 %: 15 mins: Winter	19.143	17.830	18.373	0.543	26.9	0.778	0.000	21.1	15.197	Surcharged
S41	FEH: 100 years: +40 %: 15 mins: Winter	18.948	17.364	18.106	0.742	174.8	1.061	0.000	167.1	101.213	Surcharged

S34	FEH: 100 years: +40 %: 15 mins: Winter	22.508	21.458	21.527	0.068	13.0	0.098	0.000	12.6	5.999	OK
S54	FEH: 100 years: +40 %: 15 mins: Winter	19.935	18.585	18.631	0.046	16.5	0.066	0.000	16.4	7.617	OK
S53	FEH: 100 years: +40 %: 15 mins: Winter	20.749	19.399	19.448	0.049	19.6	0.070	0.000	19.4	9.038	OK
S29	FEH: 100 years: +40 %: 15 mins: Winter	18.557	17.507	17.629	0.123	14.6	0.175	0.000	13.7	6.741	OK
S30	FEH: 100 years: +40 %: 15 mins: Winter	18.717	17.330	17.417	0.087	42.1	0.124	0.000	41.4	22.492	OK
S59	FEH: 100 years: +40 %: 15 mins: Winter	20.588	18.832	19.051	0.219	180.0	0.314	0.000	169.0	90.656	OK
S62	FEH: 100 years: +40 %: 15 mins: Winter	19.983	18.633	19.987	1.354	54.8	5.523	3.591	27.1	25.052	Flood
S67	FEH: 100 years: +40 %: 15 mins: Winter	19.851	18.501	19.854	1.353	56.6	5.254	3.322	35.7	42.006	Flood
S51	FEH: 100 years: +40 %: 15 mins: Winter	21.081	19.731	19.778	0.047	17.8	0.067	0.000	17.7	8.244	OK
S52	FEH: 100 years: +40 %: 15 mins: Winter	19.898	18.005	18.272	0.268	37.3	0.383	0.000	33.5	23.545	Surcharged
S50	FEH: 100 years: +40 %: 15 mins: Winter	21.912	20.562	20.609	0.047	17.9	0.068	0.000	17.7	8.261	OK
S66	FEH: 100 years: +40 %: 30 mins: Winter	20.223	18.873	20.226	1.353	26.6	5.099	3.167	26.3	30.975	Flood
S65	FEH: 100 years: +40 %: 15 mins: Winter	20.373	19.023	20.375	1.352	19.9	3.470	1.538	15.0	15.096	Flood
S64	FEH: 100 years: +40 %: 30 mins: Winter	20.425	19.075	20.425	1.350	14.2	1.932	0.000	14.5	13.164	Flood
S68	FEH: 100 years: +40 %: 15 mins: Winter	18.787	17.362	18.418	1.056	145.9	1.511	0.000	144.3	125.066	Surcharged
S63	FEH: 100 years: +40 %: 15 mins: Winter	19.089	17.664	19.091	1.427	116.2	3.890	1.850	86.4	68.809	Flood
S61	FEH: 100 years: +40 %: 15 mins: Winter	19.592	18.167	19.267	1.100	10.5	1.574	0.000	6.6	5.316	Surcharged
S60	FEH: 100 years: +40 %: 15 mins: Winter	20.441	19.016	19.053	0.037	4.3	0.053	0.000	4.1	1.973	OK
S57	FEH: 100 years: +40 %: 15 mins: Winter	21.708	20.358	20.439	0.081	21.7	0.117	0.000	21.4	9.999	OK
S56	FEH: 100 years: +40 %: 15 mins: Winter	20.682	19.182	19.934	0.752	77.3	1.077	0.000	68.9	35.784	Surcharged
S58	FEH: 100 years: +40 %: 15 mins: Winter	21.365	19.007	19.753	0.747	137.0	1.068	0.000	128.9	67.382	Surcharged

S10	FEH: 100 years: +40 %: 15 mins: Winter	17.122	16.307	17.130	0.823	40.2	8.099	6.932	22.0	19.275	Flood
S13	FEH: 100 years: +40 %: 30 mins: Winter	17.272	16.222	17.194	0.972	17.4	1.391	0.000	16.6	16.087	Surcharged
S23	FEH: 100 years: +40 %: 15 mins: Winter	17.532	16.482	16.984	0.502	29.4	0.718	0.000	20.0	13.587	Surcharged
S46	FEH: 100 years: +40 %: 15 mins: Winter	18.234	17.070	17.275	0.205	32.2	0.294	0.000	29.3	21.074	Surcharged
S45	FEH: 100 years: +40 %: 15 mins: Winter	18.346	17.226	17.541	0.315	27.1	0.451	0.000	24.1	17.228	Surcharged
S44	FEH: 100 years: +40 %: 15 mins: Winter	18.554	17.455	17.794	0.339	23.2	0.486	0.000	19.7	13.828	Surcharged
S43	FEH: 100 years: +40 %: 15 mins: Winter	18.708	17.641	17.933	0.292	18.8	0.418	0.000	16.1	10.519	Surcharged
S42	FEH: 100 years: +40 %: 15 mins: Winter	18.927	17.877	17.993	0.116	14.5	0.167	0.000	10.4	6.667	OK
S33	FEH: 100 years: +40 %: 240 mins: Winter	16.363	15.500	15.931	0.431	86.9	0.762	0.000	86.9	493.771	OK
S21	FEH: 100 years: +40 %: 15 mins: Winter	17.167	16.070	17.167	1.097	32.0	1.955	0.386	27.5	14.824	Flood
S28	FEH: 100 years: +40 %: 15 mins: Winter	19.084	17.825	18.011	0.186	26.6	0.266	0.000	24.6	14.050	Surcharged
S27	FEH: 100 years: +40 %: 15 mins: Winter	19.180	17.980	18.150	0.170	19.3	0.243	0.000	15.6	9.006	Surcharged
S26	FEH: 100 years: +40 %: 15 mins: Winter	19.159	18.109	18.201	0.092	12.2	0.132	0.000	12.0	5.612	OK
S2	FEH: 100 years: +40 %: 15 mins: Winter	18.924	17.874	17.999	0.125	25.4	0.179	0.000	21.9	11.645	OK
S3	FEH: 100 years: +40 %: 30 mins: Winter	18.271	16.972	17.695	0.723	19.4	1.035	0.000	18.6	18.442	Surcharged
S8	FEH: 100 years: +40 %: 30 mins: Winter	17.930	16.439	17.561	1.122	26.4	1.605	0.000	28.7	37.313	Surcharged
S20	FEH: 100 years: +40 %: 30 mins: Winter	17.644	16.021	17.030	1.009	105.7	1.444	0.000	106.0	130.531	Surcharged
S6	FEH: 100 years: +40 %: 30 mins: Winter	17.911	16.540	17.601	1.061	14.1	1.518	0.000	15.6	18.855	Surcharged
S5	FEH: 100 years: +40 %: 30 mins: Winter	17.755	16.645	17.620	0.976	12.9	1.396	0.000	13.0	16.187	Surcharged
S4	FEH: 100 years: +40 %: 15 mins: Winter	17.613	16.763	17.616	0.853	16.5	3.861	2.644	9.5	8.187	Flood
S71	FEH: 100 years: +40 %: 30 mins: Winter	18.234	16.353	17.190	0.837	161.5	1.198	0.000	162.3	205.520	Surcharged

S70	FEH: 100 years: +40 %: 30 mins: Winter	17.866	16.461	17.585	1.124	146.3	1.608	0.000	147.0	174.571	Surcharged
S69	FEH: 100 years: +40 %: 15 mins: Winter	17.787	16.530	17.799	1.269	147.4	13.389	11.590	132.9	126.379	Flood
S102	FEH: 100 years: +40 %: 15 mins: Winter	19.111	18.061	18.158	0.097	16.8	0.139	0.000	16.1	7.750	OK
S103	FEH: 100 years: +40 %: 15 mins: Winter	18.699	17.665	17.967	0.302	30.7	0.432	0.000	24.9	14.458	Surcharged
S104	FEH: 100 years: +40 %: 15 mins: Summer	18.310	17.260	17.321	0.061	25.1	0.087	0.000	25.1	12.934	OK
MDSuds feature E	FEH: 100 years: +40 %: 480 mins: Winter	17.157	14.800	14.901	0.101	32.3	0.000	0.000	32.3	1546.815	OK
MDFlow Control	FEH: 100 years: +40 %: 240 mins: Winter	16.200	15.102	15.925	0.823	32.4	0.931	0.000	32.3	751.020	Surcharged
MD39	FEH: 100 years: +40 %: 30 mins: Winter	17.810	15.973	16.335	0.362	41.0	0.409	0.000	40.1	39.204	Surcharged
MD38	FEH: 100 years: +40 %: 15 mins: Winter	17.919	16.135	16.403	0.268	33.1	0.303	0.000	27.8	18.915	Surcharged
MD37	FEH: 100 years: +40 %: 30 mins: Winter	17.562	16.278	16.412	0.134	10.7	0.152	0.000	10.3	9.854	OK
MD40	FEH: 100 years: +40 %: 30 mins: Winter	18.005	15.385	16.188	0.803	767.2	0.909	0.000	766.8	751.608	Surcharged
MD36	FEH: 100 years: +40 %: 30 mins: Winter	18.328	15.432	16.319	0.887	508.0	1.567	0.000	507.7	515.325	Surcharged
MD35	FEH: 100 years: +40 %: 15 mins: Winter	18.670	15.494	16.484	0.989	497.8	1.119	0.000	481.1	373.827	Surcharged
MD34	FEH: 100 years: +40 %: 15 mins: Winter	18.958	15.541	16.612	1.070	482.1	1.891	0.000	467.9	361.826	Surcharged
MD33	FEH: 100 years: +40 %: 15 mins: Winter	19.226	15.598	16.738	1.140	461.0	2.014	0.000	446.1	346.578	Surcharged
MD32	FEH: 100 years: +40 %: 15 mins: Winter	18.990	15.810	16.810	0.999	202.4	1.766	0.000	212.5	198.797	Surcharged
MD30	FEH: 100 years: +40 %: 15 mins: Winter	17.848	16.423	17.037	0.614	25.6	0.695	0.000	17.8	11.843	Surcharged
MD31	FEH: 100 years: +40 %: 15 mins: Winter	18.115	15.936	16.950	1.014	205.8	1.792	0.000	194.2	187.725	Surcharged
SWMH70	FEH: 100 years: +40 %: 15 mins: Winter	19.500	16.120	17.917	1.797	257.5	2.572	0.000	256.0	138.306	OK
S47	FEH: 100 years: +40 %: 15 mins: Winter	18.150	16.490	16.727	0.237	249.2	0.339	0.000	252.9	148.116	OK
S105	FEH: 100 years: +40 %: 30 mins: Winter	18.046	16.407	17.397	0.990	148.5	1.416	0.000	149.3	178.414	Surcharged

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

SWMH69	FEH: 100 years: +40 %: 15 mins: Winter	20.380	17.210	18.104	0.894	209.7	1.279	0.000	207.6	113.885	Surcharged
SWMH68	FEH: 100 years: +40 %: 15 mins: Winter	21.500	18.020	18.106	0.086	18.5	0.124	0.000	6.6	8.749	OK
SWMH67	FEH: 100 years: +40 %: 15 mins: Winter	22.250	19.430	19.441	0.011	0.9	0.015	0.000	0.8	0.424	OK
S49	FEH: 100 years: +40 %: 15 mins: Winter	22.709	21.359	21.371	0.012	0.9	0.017	0.000	0.9	0.425	OK
S108	FEH: 100 years: +40 %: 15 mins: Winter	19.553	18.203	18.440	0.237	19.9	0.340	0.000	21.6	13.566	Surcharged
S107	FEH: 100 years: +40 %: 15 mins: Winter	19.708	18.308	18.615	0.307	24.0	0.440	0.000	19.9	13.535	Surcharged
S106	FEH: 100 years: +40 %: 15 mins: Winter	19.789	18.439	18.716	0.277	19.2	0.396	0.000	14.1	8.969	Surcharged

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. 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 (%)
Basin E	FEH: 2 years: +0 %: 240 mins: Winter	15.420	15.420	0.220	0.220	100.3	376.098	0.000	0.000	27.5	447.540		85.379

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Status
OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

FEH: 30 years: Increase Rainfall (%): +30: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. 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 (%)
Basin E	FEH: 30 years: +30 %: 240 mins: Winter	15.745	15.745	0.545	0.545	235.5	1006.289	0.000	0.000	32.4	766.012		60.880

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Status
OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

FEH: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. 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 (%)
Basin E	FEH: 100 years: +40 %: 240 mins: Winter	15.931	15.931	0.731	0.731	310.2	1409.245	0.000	0.000	32.4	751.871	75	45.215

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Status
OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S78	FEH: 2 years: +0 %: 15 mins: Winter	18.278	16.165	16.345	0.180	47.3	0.257	0.000	45.2	23.935	OK
S79	FEH: 2 years: +0 %: 15 mins: Winter	17.947	16.077	16.234	0.157	47.3	0.225	0.000	45.1	24.861	OK
S95	FEH: 2 years: +0 %: 15 mins: Winter	18.632	16.602	16.820	0.218	149.1	0.384	0.000	142.0	77.324	OK
S94	FEH: 2 years: +0 %: 15 mins: Winter	19.118	17.000	17.171	0.171	100.7	0.301	0.000	97.2	53.339	OK
S93	FEH: 2 years: +0 %: 15 mins: Winter	19.513	18.423	18.549	0.126	39.8	0.181	0.000	37.6	20.697	OK
S92	FEH: 2 years: +0 %: 15 mins: Winter	19.727	18.632	18.754	0.123	34.2	0.176	0.000	33.2	17.659	OK
S91	FEH: 2 years: +0 %: 15 mins: Winter	19.957	18.792	18.912	0.120	27.3	0.172	0.000	26.7	14.199	OK
S90	FEH: 2 years: +0 %: 15 mins: Winter	20.202	19.139	19.218	0.079	12.3	0.113	0.000	11.6	5.768	OK
S89	FEH: 2 years: +0 %: 15 mins: Winter	20.547	19.497	19.543	0.046	5.0	0.066	0.000	4.8	2.314	OK
S88	FEH: 2 years: +0 %: 15 mins: Winter	20.127	19.078	19.176	0.098	12.5	0.141	0.000	10.3	5.917	OK
S87	FEH: 2 years: +0 %: 15 mins: Winter	20.287	19.237	19.260	0.024	0.9	0.034	0.000	0.8	0.422	OK
S86	FEH: 2 years: +0 %: 15 mins: Winter	20.535	19.485	19.533	0.048	4.4	0.068	0.000	4.2	2.056	OK
S74	FEH: 2 years: +0 %: 15 mins: Winter	18.662	17.265	17.335	0.071	18.0	0.101	0.000	17.0	8.624	OK
S73	FEH: 2 years: +0 %: 15 mins: Winter	19.201	18.030	18.090	0.060	10.3	0.085	0.000	9.8	4.834	OK
S84	FEH: 2 years: +0 %: 15 mins: Winter	19.486	17.491	17.629	0.138	45.8	0.198	0.000	45.0	23.884	OK
S82	FEH: 2 years: +0 %: 15 mins: Winter	18.889	17.839	17.982	0.143	38.1	0.205	0.000	33.9	18.231	OK
S81	FEH: 2 years: +0 %: 15 mins: Winter	19.832	18.782	18.853	0.071	9.8	0.102	0.000	8.3	4.516	OK

S83	FEH: 2 years: +0 %: 15 mins: Winter	19.996	18.707	18.757	0.050	6.9	0.072	0.000	6.5	3.163	OK
S85	FEH: 2 years: +0 %: 15 mins: Winter	19.237	17.391	17.494	0.103	48.8	0.147	0.000	47.7	25.598	OK
S72	FEH: 2 years: +0 %: 15 mins: Winter	19.749	18.699	18.739	0.040	5.1	0.057	0.000	4.9	2.345	OK
S77	FEH: 2 years: +0 %: 15 mins: Winter	18.650	16.516	16.619	0.103	18.6	0.147	0.000	16.5	8.976	OK
S76	FEH: 2 years: +0 %: 15 mins: Winter	19.106	16.690	16.789	0.099	15.2	0.141	0.000	14.5	7.122	OK
S75	FEH: 2 years: +0 %: 15 mins: Winter	20.047	18.539	18.578	0.039	8.8	0.056	0.000	8.6	4.058	OK
S97	FEH: 2 years: +0 %: 15 mins: Winter	17.465	15.798	16.026	0.228	139.1	0.326	0.000	128.9	79.112	OK
S96	FEH: 2 years: +0 %: 15 mins: Winter	18.007	16.362	16.557	0.195	146.3	0.344	0.000	139.1	79.239	OK
S80	FEH: 2 years: +0 %: 15 mins: Winter	17.965	16.055	16.176	0.121	52.7	0.173	0.000	51.3	28.807	OK
S99	FEH: 2 years: +0 %: 15 mins: Winter	18.021	16.971	17.024	0.053	4.0	0.075	0.000	3.8	1.873	OK
S100	FEH: 2 years: +0 %: 15 mins: Winter	18.135	16.843	16.918	0.075	7.2	0.108	0.000	6.7	3.430	OK
S101	FEH: 2 years: +0 %: 15 mins: Winter	18.095	16.680	16.726	0.046	7.8	0.067	0.000	7.6	3.969	OK
MDS	FEH: 2 years: +0 %: 180 mins: Winter	15.500	14.738	14.809	0.071	18.4	0.000	0.000	18.4	283.307	OK
SFlow MDControl	FEH: 2 years: +0 %: 180 mins: Winter	16.508	15.300	15.678	0.378	18.4	0.427	0.000	18.4	283.378	Surcharged
MDS43	FEH: 2 years: +0 %: 15 mins: Winter	17.854	15.681	15.845	0.164	64.5	0.234	0.000	58.9	35.424	OK
MDS41	FEH: 2 years: +0 %: 15 mins: Winter	17.598	16.173	16.238	0.065	9.6	0.073	0.000	9.2	4.423	OK
MDS42	FEH: 2 years: +0 %: 15 mins: Winter	17.699	15.766	15.937	0.171	64.8	0.245	0.000	63.5	35.202	OK
MDS46	FEH: 2 years: +0 %: 15 mins: Winter	16.916	15.779	15.880	0.101	16.2	0.114	0.000	12.2	7.527	OK
MDS47	FEH: 2 years: +0 %: 15 mins: Winter	16.710	15.595	15.867	0.272	153.9	0.480	0.000	142.5	96.427	OK
MDS44	FEH: 2 years: +0 %: 15 mins: Winter	17.763	16.338	16.427	0.089	20.0	0.101	0.000	19.0	9.236	OK
MDS45	FEH: 2 years: +0 %: 15 mins: Winter	17.080	15.618	15.935	0.317	150.4	0.561	0.000	141.7	89.238	OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Junctions Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

FEH: 30 years: Increase Rainfall (%): +30: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S78	FEH: 30 years: +30 %: 15 mins: Winter	18.278	16.165	16.530	0.365	129.5	0.522	0.000	122.6	65.901	OK
S79	FEH: 30 years: +30 %: 15 mins: Winter	17.947	16.077	16.377	0.300	128.4	0.429	0.000	123.1	68.533	OK
S95	FEH: 30 years: +30 %: 15 mins: Winter	18.632	16.602	17.018	0.415	388.3	0.734	0.000	364.4	212.880	OK
S94	FEH: 30 years: +30 %: 15 mins: Winter	19.118	17.000	17.301	0.301	250.3	0.532	0.000	245.8	146.972	OK
S93	FEH: 30 years: +30 %: 15 mins: Winter	19.513	18.423	18.889	0.467	84.2	0.668	0.000	79.2	57.008	Surcharged
S92	FEH: 30 years: +30 %: 15 mins: Winter	19.727	18.632	19.146	0.514	71.2	0.736	0.000	66.0	48.599	Surcharged
S91	FEH: 30 years: +30 %: 15 mins: Winter	19.957	18.792	19.311	0.519	56.0	0.743	0.000	53.8	39.086	Surcharged
S90	FEH: 30 years: +30 %: 15 mins: Winter	20.202	19.139	19.608	0.469	27.5	0.671	0.000	23.4	15.768	Surcharged
S89	FEH: 30 years: +30 %: 15 mins: Winter	20.547	19.497	19.637	0.140	13.8	0.200	0.000	6.9	6.353	OK
S88	FEH: 30 years: +30 %: 15 mins: Winter	20.127	19.078	19.707	0.629	25.3	0.900	0.000	23.2	16.908	Surcharged
S87	FEH: 30 years: +30 %: 15 mins: Winter	20.287	19.237	19.730	0.493	4.9	0.706	0.000	5.0	1.753	Surcharged
S86	FEH: 30 years: +30 %: 15 mins: Winter	20.535	19.485	19.783	0.299	12.2	0.427	0.000	7.9	5.624	Surcharged
S74	FEH: 30 years: +30 %: 15 mins: Winter	18.662	17.265	17.388	0.123	49.4	0.176	0.000	48.4	23.639	OK
S73	FEH: 30 years: +30 %: 15 mins: Winter	19.201	18.030	18.147	0.117	28.5	0.167	0.000	26.9	13.308	OK
S84	FEH: 30 years: +30 %: 15 mins: Winter	19.486	17.491	17.739	0.248	122.7	0.355	0.000	120.7	65.841	OK
S82	FEH: 30 years: +30 %: 15 mins: Winter	18.889	17.839	18.175	0.336	101.5	0.481	0.000	89.7	50.265	Surcharged
S81	FEH: 30 years: +30 %: 15 mins: Winter	19.832	18.782	19.037	0.255	26.9	0.365	0.000	19.9	12.561	Surcharged

S83	FEH: 30 years: +30 %: 15 mins: Winter	19.996	18.707	18.798	0.091	18.8	0.131	0.000	18.1	8.716	OK
S85	FEH: 30 years: +30 %: 15 mins: Winter	19.237	17.391	17.577	0.186	131.0	0.267	0.000	129.0	70.572	OK
S72	FEH: 30 years: +30 %: 15 mins: Winter	19.749	18.699	18.768	0.069	13.9	0.099	0.000	13.6	6.456	OK
S77	FEH: 30 years: +30 %: 15 mins: Winter	18.650	16.516	16.760	0.244	47.7	0.349	0.000	43.5	24.819	Surcharged
S76	FEH: 30 years: +30 %: 15 mins: Winter	19.106	16.690	16.906	0.216	42.0	0.310	0.000	36.5	19.536	OK
S75	FEH: 30 years: +30 %: 15 mins: Winter	20.047	18.539	18.605	0.066	24.1	0.094	0.000	23.8	11.133	OK
S97	FEH: 30 years: +30 %: 15 mins: Winter	17.465	15.798	16.520	0.722	331.0	1.034	0.000	323.9	217.981	Surcharged
S96	FEH: 30 years: +30 %: 15 mins: Winter	18.007	16.362	16.757	0.395	376.1	0.698	0.000	331.0	218.125	OK
S80	FEH: 30 years: +30 %: 15 mins: Winter	17.965	16.055	16.293	0.238	142.8	0.340	0.000	140.2	79.383	OK
S99	FEH: 30 years: +30 %: 15 mins: Winter	18.021	16.971	17.068	0.097	11.1	0.139	0.000	10.0	5.119	OK
S100	FEH: 30 years: +30 %: 15 mins: Winter	18.135	16.843	17.024	0.181	19.2	0.259	0.000	17.1	9.387	Surcharged
S101	FEH: 30 years: +30 %: 15 mins: Winter	18.095	16.680	16.763	0.083	20.3	0.119	0.000	19.6	10.870	OK
MDS	FEH: 30 years: +30 %: 360 mins: Summer	15.500	14.738	14.809	0.071	18.4	0.000	0.000	18.4	674.615	OK
SFlow MDControl	FEH: 30 years: +30 %: 180 mins: Winter	16.508	15.300	16.111	0.811	18.6	0.918	0.000	18.4	320.968	Surcharged
MDS43	FEH: 30 years: +30 %: 180 mins: Winter	17.854	15.681	16.118	0.437	48.2	0.625	0.000	47.4	205.163	OK
MDS41	FEH: 30 years: +30 %: 15 mins: Winter	17.598	16.173	16.289	0.116	26.3	0.131	0.000	25.4	12.098	OK
MDS42	FEH: 30 years: +30 %: 180 mins: Winter	17.699	15.766	16.118	0.352	47.7	0.504	0.000	47.6	205.648	OK
MDS46	FEH: 30 years: +30 %: 15 mins: Winter	16.916	15.779	16.336	0.557	44.4	0.630	0.000	44.2	20.507	Surcharged
MDS47	FEH: 30 years: +30 %: 15 mins: Winter	16.710	15.595	16.235	0.640	420.7	1.130	0.000	420.3	259.556	Surcharged
MDS44	FEH: 30 years: +30 %: 15 mins: Winter	17.763	16.338	16.958	0.620	54.8	0.701	0.000	47.4	25.262	Surcharged
MDS45	FEH: 30 years: +30 %: 15 mins: Winter	17.080	15.618	16.373	0.755	378.2	1.334	0.000	376.5	243.441	Surcharged

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

FEH: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S78	FEH: 100 years: +40 %: 15 mins: Winter	18.278	16.165	16.741	0.576	167.1	0.824	0.000	161.3	88.746	Surcharged
S79	FEH: 100 years: +40 %: 15 mins: Winter	17.947	16.077	16.495	0.418	169.1	0.598	0.000	165.1	92.321	Surcharged
S95	FEH: 100 years: +40 %: 15 mins: Winter	18.632	16.602	17.654	1.052	442.7	1.859	0.000	421.9	286.757	Surcharged
S94	FEH: 100 years: +40 %: 15 mins: Winter	19.118	17.000	17.807	0.807	291.0	1.426	0.000	250.7	198.163	Surcharged
S93	FEH: 100 years: +40 %: 15 mins: Winter	19.513	18.423	19.216	0.793	101.1	1.135	0.000	94.9	76.848	Surcharged
S92	FEH: 100 years: +40 %: 15 mins: Winter	19.727	18.632	19.548	0.916	84.1	1.311	0.000	76.5	65.526	Surcharged
S91	FEH: 100 years: +40 %: 30 mins: Winter	19.957	18.792	19.750	0.958	61.2	1.371	0.000	60.3	70.738	Surcharged
S90	FEH: 100 years: +40 %: 15 mins: Winter	20.202	19.139	20.202	1.063	36.1	1.682	0.161	34.3	21.234	Surcharged
S89	FEH: 100 years: +40 %: 15 mins: Winter	20.547	19.497	20.218	0.721	18.5	1.032	0.000	8.5	8.562	Surcharged
S88	FEH: 100 years: +40 %: 15 mins: Winter	20.127	19.078	20.131	1.053	34.7	4.897	3.394	23.3	22.941	Flood
S87	FEH: 100 years: +40 %: 30 mins: Summer	20.287	19.237	20.152	0.916	5.5	1.310	0.000	6.1	2.509	Surcharged
S86	FEH: 100 years: +40 %: 30 mins: Winter	20.535	19.485	20.267	0.782	11.1	1.119	0.000	11.0	10.182	Surcharged
S74	FEH: 100 years: +40 %: 15 mins: Winter	18.662	17.265	17.410	0.146	62.3	0.208	0.000	61.1	31.823	OK
S73	FEH: 100 years: +40 %: 15 mins: Winter	19.201	18.030	18.272	0.242	38.3	0.347	0.000	32.0	17.923	Surcharged
S84	FEH: 100 years: +40 %: 15 mins: Winter	19.486	17.491	17.918	0.428	168.3	0.612	0.000	120.1	88.607	Surcharged
S82	FEH: 100 years: +40 %: 15 mins: Winter	18.889	17.839	18.620	0.782	132.9	1.119	0.000	124.0	67.512	Surcharged
S81	FEH: 100 years: +40 %: 15 mins: Winter	19.832	18.782	19.720	0.938	36.2	1.342	0.000	25.3	16.924	Surcharged

S83	FEH: 100 years: +40 %: 15 mins: Winter	19.996	18.707	18.821	0.114	25.4	0.163	0.000	24.3	11.664	OK
S85	FEH: 100 years: +40 %: 15 mins: Winter	19.237	17.391	17.841	0.450	133.9	0.644	0.000	139.3	94.946	Surcharged
S72	FEH: 100 years: +40 %: 15 mins: Winter	19.749	18.699	18.782	0.083	18.8	0.119	0.000	18.4	8.681	OK
S77	FEH: 100 years: +40 %: 15 mins: Winter	18.650	16.516	17.132	0.616	62.6	0.882	0.000	55.3	33.423	Surcharged
S76	FEH: 100 years: +40 %: 15 mins: Winter	19.106	16.690	17.418	0.728	56.6	1.041	0.000	47.5	26.300	Surcharged
S75	FEH: 100 years: +40 %: 15 mins: Winter	20.047	18.539	18.618	0.079	32.4	0.113	0.000	32.2	14.984	OK
S97	FEH: 100 years: +40 %: 15 mins: Winter	17.465	15.798	16.867	1.069	418.6	1.529	0.000	404.6	291.929	Surcharged
S96	FEH: 100 years: +40 %: 15 mins: Winter	18.007	16.362	17.372	1.010	437.7	1.785	0.000	418.6	293.957	Surcharged
S80	FEH: 100 years: +40 %: 15 mins: Winter	17.965	16.055	16.368	0.313	189.5	0.447	0.000	186.6	106.769	OK
S99	FEH: 100 years: +40 %: 15 mins: Winter	18.021	16.971	17.251	0.280	14.9	0.400	0.000	11.3	6.893	Surcharged
S100	FEH: 100 years: +40 %: 15 mins: Winter	18.135	16.843	17.159	0.316	23.7	0.453	0.000	20.6	12.646	Surcharged
S101	FEH: 100 years: +40 %: 15 mins: Winter	18.095	16.680	16.777	0.097	25.0	0.138	0.000	24.4	14.643	OK
MDS	FEH: 100 years: +40 %: 960 mins: Winter	15.500	14.738	14.809	0.071	18.4	0.000	0.000	18.4	1429.312	OK
SFlow MDControl	FEH: 100 years: +40 %: 240 mins: Winter	16.508	15.300	16.322	1.022	18.6	1.156	0.000	18.4	450.878	Surcharged
MDS43	FEH: 100 years: +40 %: 240 mins: Winter	17.854	15.681	16.331	0.650	50.4	0.930	0.000	48.6	287.421	Surcharged
MDS41	FEH: 100 years: +40 %: 240 mins: Winter	17.598	16.173	16.331	0.158	6.3	0.178	0.000	6.3	36.381	OK
MDS42	FEH: 100 years: +40 %: 240 mins: Winter	17.699	15.766	16.331	0.565	50.5	0.808	0.000	49.7	288.037	Surcharged
MDS46	FEH: 100 years: +40 %: 15 mins: Winter	16.916	15.779	16.504	0.725	59.8	0.819	0.000	58.6	26.860	Surcharged
MDS47	FEH: 100 years: +40 %: 15 mins: Winter	16.710	15.595	16.373	0.778	526.5	1.375	0.000	518.7	345.697	Surcharged
MDS44	FEH: 100 years: +40 %: 15 mins: Winter	17.763	16.338	17.589	1.251	73.8	1.415	0.000	65.1	33.977	Surcharged
MDS45	FEH: 100 years: +40 %: 15 mins: Winter	17.080	15.618	16.604	0.986	478.9	1.743	0.000	467.9	325.473	Surcharged

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

FEH: 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. 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 (%)
Basin A	FEH: 2 years: +0 %: 180 mins: Winter	15.687	15.687	0.286	0.286	74.6	203.731	0.000	0.000	18.4	283.532		83.325

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Status
OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

FEH: 30 years: Increase Rainfall (%): +30: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. 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 (%)
Basin A	FEH: 30 years: +30 %: 180 mins: Winter	16.118	16.118	0.717	0.717	176.3	605.469	0.000	0.000	18.6	321.767		50.444

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Status
OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

FEH: 100 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. 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 (%)
Basin A	FEH: 100 years: +40 %: 240 mins: Winter	16.331	16.331	0.930	0.930	182.0	849.585	0.000	0.000	18.6	451.876		30.464

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Status
OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Title: Rainfall Analysis Criteria	Motion: 84 North Street Guildford GU1 4AU		

FEH (1)

Type: FEH

Site Location	GB 448927 117350 SU 48927 17350
Rainfall Version	2022
Summer	☑
Winter	☑

Return Period

Return Period (years)	Increase Rainfall (%)
2.0	0.000
30.0	40.000
100.0	45.000

Storm Durations

Duration (mins)	Run Time (mins)
15	30
30	60
60	120
120	240
180	360
240	480
360	720
480	960
600	1200
720	1440
960	1920
1440	2880
2160	4320

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

FEH (1): 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S32	FEH (1): 2 years: +0 %: 30 mins: Winter	17.000	15.553	15.750	0.198	88.2	0.349	0.000	88.0	82.002	OK
S31	FEH (1): 2 years: +0 %: 15 mins: Winter	17.491	15.651	15.865	0.214	91.2	0.378	0.000	82.6	58.137	OK
S25	FEH (1): 2 years: +0 %: 15 mins: Winter	18.017	15.756	15.972	0.216	68.7	0.309	0.000	62.3	44.251	OK
S24	FEH (1): 2 years: +0 %: 15 mins: Winter	17.930	15.836	16.062	0.226	72.9	0.323	0.000	65.9	43.127	OK
S22	FEH (1): 2 years: +0 %: 15 mins: Winter	17.526	15.960	16.154	0.194	59.0	0.278	0.000	54.0	34.380	OK
S18	FEH (1): 2 years: +0 %: 15 mins: Winter	17.652	16.058	16.221	0.163	31.8	0.233	0.000	28.6	16.978	OK
S12	FEH (1): 2 years: +0 %: 15 mins: Winter	17.490	16.138	16.261	0.122	25.9	0.175	0.000	23.9	13.259	OK
S11	FEH (1): 2 years: +0 %: 15 mins: Winter	17.361	16.205	16.317	0.112	21.5	0.161	0.000	19.9	10.495	OK
S9	FEH (1): 2 years: +0 %: 15 mins: Winter	17.409	16.269	16.324	0.055	3.9	0.079	0.000	3.2	1.795	OK
S35	FEH (1): 2 years: +0 %: 15 mins: Winter	21.772	20.422	20.449	0.027	3.5	0.038	0.000	3.3	1.671	OK
S37	FEH (1): 2 years: +0 %: 15 mins: Winter	20.321	18.318	18.395	0.077	22.2	0.087	0.000	21.2	10.731	OK
S38	FEH (1): 2 years: +0 %: 15 mins: Winter	19.643	17.856	17.953	0.097	31.8	0.110	0.000	31.0	15.601	OK
S48	FEH (1): 2 years: +0 %: 15 mins: Winter	18.125	16.605	16.863	0.258	72.8	0.370	0.000	69.3	35.550	OK
S36	FEH (1): 2 years: +0 %: 15 mins: Winter	19.649	18.599	18.690	0.092	10.0	0.131	0.000	9.3	4.608	OK
S39	FEH (1): 2 years: +0 %: 15 mins: Winter	19.299	18.249	18.273	0.023	1.6	0.034	0.000	1.5	0.739	OK
S40	FEH (1): 2 years: +0 %: 15 mins: Winter	19.143	17.830	17.887	0.057	9.1	0.082	0.000	8.7	4.220	OK
S41	FEH (1): 2 years: +0 %: 15 mins: Winter	18.948	17.364	17.470	0.106	58.0	0.151	0.000	56.9	28.256	OK

S34	FEH (1): 2 years: +0 %: 15 mins: Winter	22.508	21.458	21.492	0.034	3.6	0.049	0.000	3.5	1.677	OK
S54	FEH (1): 2 years: +0 %: 15 mins: Winter	19.935	18.585	18.609	0.024	4.6	0.034	0.000	4.6	2.131	OK
S53	FEH (1): 2 years: +0 %: 15 mins: Summer	20.749	19.399	19.425	0.026	5.2	0.037	0.000	5.1	2.254	OK
S29	FEH (1): 2 years: +0 %: 15 mins: Winter	18.557	17.507	17.561	0.055	4.1	0.078	0.000	3.8	1.877	OK
S30	FEH (1): 2 years: +0 %: 15 mins: Winter	18.717	17.330	17.374	0.044	12.5	0.063	0.000	12.0	6.284	OK
S59	FEH (1): 2 years: +0 %: 15 mins: Winter	20.588	18.832	18.928	0.096	50.4	0.138	0.000	49.1	25.133	OK
S62	FEH (1): 2 years: +0 %: 15 mins: Winter	19.983	18.633	18.716	0.083	15.3	0.119	0.000	14.2	7.090	OK
S67	FEH (1): 2 years: +0 %: 15 mins: Winter	19.851	18.501	18.604	0.103	23.4	0.147	0.000	20.9	11.713	OK
S51	FEH (1): 2 years: +0 %: 15 mins: Summer	21.081	19.731	19.756	0.025	4.7	0.035	0.000	4.7	2.056	OK
S52	FEH (1): 2 years: +0 %: 15 mins: Winter	19.898	18.005	18.045	0.040	13.0	0.057	0.000	12.8	6.557	OK
S50	FEH (1): 2 years: +0 %: 15 mins: Winter	21.912	20.562	20.586	0.024	5.0	0.035	0.000	4.9	2.312	OK
S66	FEH (1): 2 years: +0 %: 15 mins: Winter	20.223	18.873	18.974	0.101	13.2	0.144	0.000	11.9	6.406	OK
S65	FEH (1): 2 years: +0 %: 15 mins: Winter	20.373	19.023	19.107	0.084	8.8	0.120	0.000	8.3	4.184	OK
S64	FEH (1): 2 years: +0 %: 15 mins: Winter	20.425	19.075	19.145	0.070	5.9	0.100	0.000	5.7	2.740	OK
S68	FEH (1): 2 years: +0 %: 15 mins: Winter	18.787	17.362	17.489	0.127	67.7	0.182	0.000	65.8	34.921	OK
S63	FEH (1): 2 years: +0 %: 15 mins: Winter	19.089	17.664	17.813	0.149	40.0	0.213	0.000	37.9	19.108	OK
S61	FEH (1): 2 years: +0 %: 15 mins: Winter	19.592	18.167	18.207	0.040	2.9	0.057	0.000	2.7	1.366	OK
S60	FEH (1): 2 years: +0 %: 15 mins: Winter	20.441	19.016	19.036	0.020	1.2	0.028	0.000	1.1	0.550	OK
S57	FEH (1): 2 years: +0 %: 15 mins: Winter	21.708	20.358	20.398	0.040	6.1	0.058	0.000	5.8	2.810	OK
S56	FEH (1): 2 years: +0 %: 15 mins: Winter	20.682	19.182	19.290	0.108	21.6	0.154	0.000	20.5	9.995	OK
S58	FEH (1): 2 years: +0 %: 15 mins: Winter	21.365	19.007	19.162	0.155	39.4	0.222	0.000	36.1	18.806	OK

S10	FEH (1): 2 years: +0 %: 15 mins: Winter	17.122	16.307	16.411	0.104	11.2	0.149	0.000	10.7	5.200	OK
S13	FEH (1): 2 years: +0 %: 15 mins: Winter	17.272	16.222	16.286	0.064	7.2	0.091	0.000	7.0	3.354	OK
S23	FEH (1): 2 years: +0 %: 15 mins: Winter	17.532	16.482	16.531	0.049	8.2	0.070	0.000	8.0	3.798	OK
S46	FEH (1): 2 years: +0 %: 15 mins: Winter	18.234	17.070	17.136	0.066	11.4	0.094	0.000	10.9	5.869	OK
S45	FEH (1): 2 years: +0 %: 15 mins: Winter	18.346	17.226	17.302	0.076	9.6	0.109	0.000	9.1	4.800	OK
S44	FEH (1): 2 years: +0 %: 15 mins: Winter	18.554	17.455	17.521	0.066	7.9	0.094	0.000	7.5	3.857	OK
S43	FEH (1): 2 years: +0 %: 15 mins: Winter	18.708	17.641	17.699	0.058	6.2	0.083	0.000	5.9	2.942	OK
S42	FEH (1): 2 years: +0 %: 15 mins: Winter	18.927	17.877	17.922	0.045	4.1	0.064	0.000	3.9	1.877	OK
S33	FEH (1): 2 years: +0 %: 30 mins: Winter	16.363	15.500	15.646	0.146	88.0	0.258	0.000	87.8	81.925	OK
S21	FEH (1): 2 years: +0 %: 15 mins: Winter	17.167	16.070	16.184	0.114	9.0	0.163	0.000	7.1	4.146	OK
S28	FEH (1): 2 years: +0 %: 15 mins: Winter	19.084	17.825	17.888	0.063	8.1	0.090	0.000	7.6	3.928	OK
S27	FEH (1): 2 years: +0 %: 15 mins: Winter	19.180	17.980	18.036	0.056	5.3	0.081	0.000	5.0	2.519	OK
S26	FEH (1): 2 years: +0 %: 15 mins: Winter	19.159	18.109	18.153	0.044	3.4	0.064	0.000	3.2	1.570	OK
S2	FEH (1): 2 years: +0 %: 15 mins: Winter	18.924	17.874	17.927	0.053	7.1	0.076	0.000	6.8	3.295	OK
S3	FEH (1): 2 years: +0 %: 15 mins: Winter	18.271	16.972	17.020	0.048	8.0	0.068	0.000	7.7	3.854	OK
S8	FEH (1): 2 years: +0 %: 15 mins: Winter	17.930	16.439	16.526	0.087	14.9	0.124	0.000	14.0	7.716	OK
S20	FEH (1): 2 years: +0 %: 15 mins: Winter	17.644	16.021	16.206	0.185	47.7	0.264	0.000	44.7	27.014	OK
S6	FEH (1): 2 years: +0 %: 15 mins: Winter	17.911	16.540	16.619	0.079	7.8	0.113	0.000	7.2	3.886	OK
S5	FEH (1): 2 years: +0 %: 15 mins: Winter	17.755	16.645	16.719	0.075	7.0	0.107	0.000	6.6	3.333	OK
S4	FEH (1): 2 years: +0 %: 15 mins: Winter	17.613	16.763	16.820	0.057	4.6	0.081	0.000	4.4	2.125	OK
S71	FEH (1): 2 years: +0 %: 15 mins: Winter	18.234	16.353	16.518	0.165	71.5	0.236	0.000	69.2	42.496	OK

S70	FEH (1): 2 years: +0 %: 15 mins: Winter	17.866	16.461	16.697	0.236	63.5	0.338	0.000	60.7	36.167	OK
S69	FEH (1): 2 years: +0 %: 15 mins: Winter	17.787	16.530	16.778	0.248	66.6	0.354	0.000	61.5	35.262	OK
S102	FEH (1): 2 years: +0 %: 15 mins: Winter	19.111	18.061	18.106	0.046	4.7	0.065	0.000	4.5	2.159	OK
S103	FEH (1): 2 years: +0 %: 15 mins: Winter	18.699	17.665	17.734	0.069	8.6	0.098	0.000	8.0	4.031	OK
S104	FEH (1): 2 years: +0 %: 15 mins: Winter	18.310	17.260	17.296	0.036	8.0	0.052	0.000	7.8	4.026	OK
MDSuds feature E	FEH (1): 2 years: +0 %: 240 mins: Winter	17.157	14.800	14.894	0.094	27.9	0.000	0.000	27.9	455.611	OK
MDFlow Control	FEH (1): 2 years: +0 %: 240 mins: Winter	16.200	15.102	15.421	0.319	27.8	0.361	0.000	27.9	455.718	Surcharged
MD39	FEH (1): 2 years: +0 %: 15 mins: Winter	17.810	15.973	16.073	0.100	16.9	0.113	0.000	15.5	8.189	OK
MD38	FEH (1): 2 years: +0 %: 15 mins: Winter	17.919	16.135	16.213	0.078	11.2	0.088	0.000	10.6	5.287	OK
MD37	FEH (1): 2 years: +0 %: 15 mins: Winter	17.562	16.278	16.326	0.048	4.4	0.054	0.000	4.2	2.054	OK
MD40	FEH (1): 2 years: +0 %: 15 mins: Winter	18.005	15.385	15.705	0.320	215.2	0.362	0.000	226.4	149.277	OK
MD36	FEH (1): 2 years: +0 %: 15 mins: Winter	18.328	15.432	15.777	0.344	160.7	0.609	0.000	170.7	99.027	OK
MD35	FEH (1): 2 years: +0 %: 15 mins: Winter	18.670	15.494	15.838	0.344	148.3	0.389	0.000	158.8	96.506	OK
MD34	FEH (1): 2 years: +0 %: 15 mins: Winter	18.958	15.541	15.882	0.340	133.2	0.601	0.000	146.0	93.147	OK
MD33	FEH (1): 2 years: +0 %: 30 mins: Winter	19.226	15.598	15.926	0.327	142.5	0.578	0.000	141.5	121.320	OK
MD32	FEH (1): 2 years: +0 %: 30 mins: Winter	18.990	15.810	16.029	0.219	79.5	0.387	0.000	79.2	73.292	OK
MD30	FEH (1): 2 years: +0 %: 15 mins: Winter	17.848	16.423	16.480	0.057	7.2	0.064	0.000	6.8	3.310	OK
MD31	FEH (1): 2 years: +0 %: 15 mins: Winter	18.115	15.936	16.169	0.233	90.2	0.412	0.000	82.5	52.329	OK
SWMH70	FEH (1): 2 years: +0 %: 30 mins: Winter	19.500	16.120	17.633	1.513	58.9	2.165	0.000	58.9	44.693	OK
S47	FEH (1): 2 years: +0 %: 15 mins: Winter	18.150	16.490	16.604	0.114	80.2	0.163	0.000	78.9	41.405	OK
S105	FEH (1): 2 years: +0 %: 15 mins: Winter	18.046	16.407	16.617	0.210	62.4	0.300	0.000	60.2	36.919	OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

SWMH69	FEH (1): 2 years: +0 %: 15 mins: Winter	20.380	17.210	17.653	0.443	64.4	0.634	0.000	39.1	29.780	OK
SWMH68	FEH (1): 2 years: +0 %: 15 mins: Winter	21.500	18.020	18.050	0.030	5.1	0.042	0.000	4.7	2.476	OK
SWMH67	FEH (1): 2 years: +0 %: 15 mins: Winter	22.250	19.430	19.435	0.005	0.2	0.008	0.000	0.2	0.118	OK
S49	FEH (1): 2 years: +0 %: 15 mins: Winter	22.709	21.359	21.366	0.007	0.3	0.009	0.000	0.2	0.119	OK
S108	FEH (1): 2 years: +0 %: 15 mins: Winter	19.553	18.203	18.273	0.071	7.4	0.101	0.000	6.9	3.762	OK
S107	FEH (1): 2 years: +0 %: 15 mins: Winter	19.708	18.308	18.382	0.074	7.8	0.106	0.000	7.4	3.779	OK
S106	FEH (1): 2 years: +0 %: 15 mins: Winter	19.789	18.439	18.496	0.057	5.4	0.081	0.000	5.0	2.502	OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		



FEH (1): 30 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S32	FEH (1): 30 years: +40 %: 15 mins: Winter	17.000	15.553	15.908	0.355	250.7	0.628	0.000	244.1	180.815	OK
S31	FEH (1): 30 years: +40 %: 15 mins: Winter	17.491	15.651	16.052	0.401	232.9	0.708	0.000	226.5	169.846	OK
S25	FEH (1): 30 years: +40 %: 30 mins: Winter	18.017	15.756	16.286	0.530	162.1	0.759	0.000	161.4	172.732	Surcharged
S24	FEH (1): 30 years: +40 %: 30 mins: Winter	17.930	15.836	16.479	0.644	157.7	0.922	0.000	156.8	167.865	Surcharged
S22	FEH (1): 30 years: +40 %: 30 mins: Winter	17.526	15.960	16.651	0.691	123.3	0.989	0.000	122.2	133.713	Surcharged
S18	FEH (1): 30 years: +40 %: 30 mins: Winter	17.652	16.058	16.730	0.672	63.9	0.961	0.000	62.6	65.817	Surcharged
S12	FEH (1): 30 years: +40 %: 30 mins: Winter	17.490	16.138	16.751	0.613	50.9	0.877	0.000	49.5	51.312	Surcharged
S11	FEH (1): 30 years: +40 %: 30 mins: Winter	17.361	16.205	16.762	0.557	40.9	0.797	0.000	39.3	40.555	Surcharged
S9	FEH (1): 30 years: +40 %: 30 mins: Winter	17.409	16.269	16.762	0.493	7.5	0.706	0.000	9.0	6.932	Surcharged
S35	FEH (1): 30 years: +40 %: 15 mins: Winter	21.772	20.422	20.468	0.046	10.2	0.066	0.000	9.8	4.861	OK
S37	FEH (1): 30 years: +40 %: 15 mins: Summer	20.321	18.318	18.462	0.144	57.8	0.163	0.000	55.7	27.816	OK
S38	FEH (1): 30 years: +40 %: 15 mins: Winter	19.643	17.856	18.291	0.435	89.0	0.492	0.000	79.9	45.301	Surcharged
S48	FEH (1): 30 years: +40 %: 15 mins: Winter	18.125	16.605	17.331	0.726	189.7	1.038	0.000	186.3	103.277	Surcharged
S36	FEH (1): 30 years: +40 %: 15 mins: Winter	19.649	18.599	19.221	0.623	29.0	0.891	0.000	23.3	13.425	Surcharged
S39	FEH (1): 30 years: +40 %: 15 mins: Winter	19.299	18.249	18.288	0.039	4.6	0.056	0.000	4.6	2.143	OK
S40	FEH (1): 30 years: +40 %: 15 mins: Winter	19.143	17.830	17.995	0.166	26.4	0.237	0.000	18.5	12.218	Surcharged
S41	FEH (1): 30 years: +40 %: 15 mins: Winter	18.948	17.364	17.779	0.415	151.2	0.594	0.000	143.4	81.983	Surcharged

S34	FEH (1): 30 years: +40 %: 15 mins: Winter	22.508	21.458	21.519	0.061	10.5	0.087	0.000	10.2	4.873	OK
S54	FEH (1): 30 years: +40 %: 15 mins: Winter	19.935	18.585	18.626	0.041	13.4	0.059	0.000	13.3	6.175	OK
S53	FEH (1): 30 years: +40 %: 15 mins: Winter	20.749	19.399	19.443	0.044	15.9	0.063	0.000	15.8	7.337	OK
S29	FEH (1): 30 years: +40 %: 15 mins: Winter	18.557	17.507	17.611	0.104	11.8	0.149	0.000	11.2	5.465	OK
S30	FEH (1): 30 years: +40 %: 15 mins: Winter	18.717	17.330	17.410	0.080	36.4	0.114	0.000	35.6	18.240	OK
S59	FEH (1): 30 years: +40 %: 15 mins: Winter	20.588	18.832	19.008	0.176	138.5	0.252	0.000	135.9	73.415	OK
S62	FEH (1): 30 years: +40 %: 15 mins: Winter	19.983	18.633	19.859	1.226	44.4	1.755	0.000	30.6	20.405	Surcharged
S67	FEH (1): 30 years: +40 %: 15 mins: Winter	19.851	18.501	19.851	1.350	44.7	2.292	0.360	36.0	34.142	Flood
S51	FEH (1): 30 years: +40 %: 15 mins: Winter	21.081	19.731	19.773	0.042	14.5	0.060	0.000	14.4	6.691	OK
S52	FEH (1): 30 years: +40 %: 15 mins: Winter	19.898	18.005	18.088	0.084	35.9	0.120	0.000	33.3	19.084	OK
S50	FEH (1): 30 years: +40 %: 15 mins: Winter	21.912	20.562	20.604	0.042	14.5	0.060	0.000	14.3	6.698	OK
S66	FEH (1): 30 years: +40 %: 15 mins: Winter	20.223	18.873	20.224	1.351	21.3	2.962	1.031	20.7	18.746	Flood
S65	FEH (1): 30 years: +40 %: 15 mins: Winter	20.373	19.023	20.299	1.276	16.8	1.826	0.000	13.9	12.184	Surcharged
S64	FEH (1): 30 years: +40 %: 15 mins: Winter	20.425	19.075	20.310	1.235	17.2	1.767	0.000	7.7	7.954	Surcharged
S68	FEH (1): 30 years: +40 %: 15 mins: Winter	18.787	17.362	18.140	0.778	139.2	1.113	0.000	129.3	101.472	Surcharged
S63	FEH (1): 30 years: +40 %: 15 mins: Winter	19.089	17.664	18.775	1.111	96.0	1.590	0.000	79.7	55.743	Surcharged
S61	FEH (1): 30 years: +40 %: 15 mins: Winter	19.592	18.167	18.763	0.596	11.5	0.853	0.000	8.0	4.341	Surcharged
S60	FEH (1): 30 years: +40 %: 15 mins: Winter	20.441	19.016	19.049	0.033	3.5	0.047	0.000	3.4	1.606	OK
S57	FEH (1): 30 years: +40 %: 15 mins: Winter	21.708	20.358	20.429	0.071	17.6	0.102	0.000	17.2	8.113	OK
S56	FEH (1): 30 years: +40 %: 15 mins: Winter	20.682	19.182	19.494	0.312	62.6	0.447	0.000	48.4	29.002	Surcharged
S58	FEH (1): 30 years: +40 %: 15 mins: Winter	21.365	19.007	19.388	0.382	103.5	0.546	0.000	97.1	54.631	Surcharged

S10	FEH (1): 30 years: +40 %: 30 mins: Winter	17.122	16.307	16.978	0.671	21.7	0.961	0.000	20.3	20.041	Surcharged
S13	FEH (1): 30 years: +40 %: 30 mins: Winter	17.272	16.222	16.818	0.596	14.0	0.853	0.000	12.7	12.937	Surcharged
S23	FEH (1): 30 years: +40 %: 15 mins: Winter	17.532	16.482	16.663	0.181	23.8	0.259	0.000	18.4	11.007	Surcharged
S46	FEH (1): 30 years: +40 %: 15 mins: Winter	18.234	17.070	17.203	0.133	29.6	0.190	0.000	28.3	17.093	OK
S45	FEH (1): 30 years: +40 %: 15 mins: Winter	18.346	17.226	17.455	0.229	24.3	0.328	0.000	22.8	13.971	Surcharged
S44	FEH (1): 30 years: +40 %: 15 mins: Winter	18.554	17.455	17.669	0.214	20.1	0.307	0.000	18.4	11.215	Surcharged
S43	FEH (1): 30 years: +40 %: 15 mins: Winter	18.708	17.641	17.768	0.127	18.4	0.182	0.000	14.3	8.534	OK
S42	FEH (1): 30 years: +40 %: 15 mins: Winter	18.927	17.877	17.960	0.084	11.7	0.120	0.000	11.7	5.420	OK
S33	FEH (1): 30 years: +40 %: 240 mins: Winter	16.363	15.500	15.795	0.295	71.1	0.521	0.000	71.4	406.667	OK
S21	FEH (1): 30 years: +40 %: 30 mins: Winter	17.167	16.070	16.796	0.726	17.3	1.039	0.000	16.1	15.989	Surcharged
S28	FEH (1): 30 years: +40 %: 15 mins: Winter	19.084	17.825	17.955	0.130	23.5	0.186	0.000	22.1	11.391	OK
S27	FEH (1): 30 years: +40 %: 15 mins: Winter	19.180	17.980	18.094	0.114	15.5	0.163	0.000	14.7	7.306	OK
S26	FEH (1): 30 years: +40 %: 15 mins: Winter	19.159	18.109	18.191	0.082	9.8	0.118	0.000	9.6	4.555	OK
S2	FEH (1): 30 years: +40 %: 15 mins: Winter	18.924	17.874	17.971	0.098	20.6	0.140	0.000	20.4	9.443	OK
S3	FEH (1): 30 years: +40 %: 15 mins: Winter	18.271	16.972	17.350	0.378	23.9	0.541	0.000	15.3	11.128	Surcharged
S8	FEH (1): 30 years: +40 %: 15 mins: Winter	17.930	16.439	17.297	0.858	25.0	1.228	0.000	27.7	22.486	Surcharged
S20	FEH (1): 30 years: +40 %: 30 mins: Winter	17.644	16.021	16.710	0.689	94.6	0.986	0.000	93.4	104.913	Surcharged
S6	FEH (1): 30 years: +40 %: 15 mins: Winter	17.911	16.540	17.398	0.859	13.8	1.229	0.000	14.1	11.361	Surcharged
S5	FEH (1): 30 years: +40 %: 15 mins: Winter	17.755	16.645	17.459	0.815	15.3	1.166	0.000	10.7	9.730	Surcharged
S4	FEH (1): 30 years: +40 %: 15 mins: Winter	17.613	16.763	17.483	0.719	13.4	1.029	0.000	7.7	6.191	Surcharged
S71	FEH (1): 30 years: +40 %: 30 mins: Winter	18.234	16.353	16.886	0.533	151.1	0.763	0.000	149.9	165.215	Surcharged

S70	FEH (1): 30 years: +40 %: 15 mins: Winter	17.866	16.461	17.447	0.986	143.4	1.412	0.000	144.5	105.319	Surcharged
S69	FEH (1): 30 years: +40 %: 15 mins: Winter	17.787	16.530	17.789	1.259	131.8	3.424	1.625	141.8	102.626	Flood
S102	FEH (1): 30 years: +40 %: 15 mins: Winter	19.111	18.061	18.143	0.083	13.6	0.118	0.000	13.2	6.288	OK
S103	FEH (1): 30 years: +40 %: 15 mins: Winter	18.699	17.665	17.825	0.159	25.0	0.228	0.000	21.2	11.750	Surcharged
S104	FEH (1): 30 years: +40 %: 15 mins: Summer	18.310	17.260	17.318	0.058	21.5	0.083	0.000	21.4	10.471	OK
MDSuds feature E	FEH (1): 30 years: +40 %: 1440 mins: Winter	17.157	14.800	14.901	0.101	32.3	0.000	0.000	32.3	2135.857	OK
MDFlow Control	FEH (1): 30 years: +40 %: 240 mins: Winter	16.200	15.102	15.787	0.685	32.4	0.775	0.000	32.3	766.655	Surcharged
MD39	FEH (1): 30 years: +40 %: 15 mins: Winter	17.810	15.973	16.201	0.228	49.0	0.257	0.000	44.2	23.495	Surcharged
MD38	FEH (1): 30 years: +40 %: 15 mins: Winter	17.919	16.135	16.287	0.152	32.7	0.172	0.000	30.8	15.316	OK
MD37	FEH (1): 30 years: +40 %: 15 mins: Winter	17.562	16.278	16.361	0.083	12.9	0.094	0.000	12.5	5.949	OK
MD40	FEH (1): 30 years: +40 %: 30 mins: Winter	18.005	15.385	16.032	0.647	642.2	0.732	0.000	639.9	608.253	OK
MD36	FEH (1): 30 years: +40 %: 30 mins: Winter	18.328	15.432	16.136	0.703	431.6	1.243	0.000	429.7	417.256	Surcharged
MD35	FEH (1): 30 years: +40 %: 30 mins: Winter	18.670	15.494	16.245	0.751	419.8	0.849	0.000	418.1	408.013	Surcharged
MD34	FEH (1): 30 years: +40 %: 30 mins: Winter	18.958	15.541	16.330	0.788	405.4	1.393	0.000	403.6	394.859	Surcharged
MD33	FEH (1): 30 years: +40 %: 30 mins: Winter	19.226	15.598	16.420	0.821	387.3	1.451	0.000	385.9	377.897	Surcharged
MD32	FEH (1): 30 years: +40 %: 30 mins: Winter	18.990	15.810	16.487	0.677	202.4	1.195	0.000	200.8	216.255	Surcharged
MD30	FEH (1): 30 years: +40 %: 30 mins: Winter	17.848	16.423	16.603	0.180	13.9	0.204	0.000	13.3	12.730	OK
MD31	FEH (1): 30 years: +40 %: 30 mins: Winter	18.115	15.936	16.589	0.653	190.0	1.154	0.000	188.2	203.435	Surcharged
SWMH70	FEH (1): 30 years: +40 %: 15 mins: Winter	19.500	16.120	17.840	1.720	220.2	2.462	0.000	213.7	110.267	OK
S47	FEH (1): 30 years: +40 %: 15 mins: Winter	18.150	16.490	16.695	0.205	214.6	0.294	0.000	213.4	119.998	OK
S105	FEH (1): 30 years: +40 %: 15 mins: Winter	18.046	16.407	17.148	0.741	145.9	1.061	0.000	147.9	107.588	Surcharged

SWMH69	FEH (1): 30 years: +40 %: 15 mins: Winter	20.380	17.210	17.985	0.775	180.3	1.109	0.000	173.6	91.766	Surcharged
SWMH68	FEH (1): 30 years: +40 %: 15 mins: Winter	21.500	18.020	18.071	0.051	15.0	0.073	0.000	14.3	7.085	OK
SWMH67	FEH (1): 30 years: +40 %: 15 mins: Winter	22.250	19.430	19.440	0.010	0.7	0.014	0.000	0.7	0.342	OK
S49	FEH (1): 30 years: +40 %: 15 mins: Winter	22.709	21.359	21.370	0.011	0.7	0.015	0.000	0.7	0.344	OK
S108	FEH (1): 30 years: +40 %: 15 mins: Winter	19.553	18.203	18.342	0.140	19.0	0.200	0.000	18.3	10.977	OK
S107	FEH (1): 30 years: +40 %: 15 mins: Winter	19.708	18.308	18.508	0.200	20.1	0.286	0.000	19.0	10.978	Surcharged
S106	FEH (1): 30 years: +40 %: 15 mins: Winter	19.789	18.439	18.579	0.139	15.6	0.199	0.000	12.0	7.280	OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

FEH (1): 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S32	FEH (1): 100 years: +45 %: 15 mins: Winter	17.000	15.553	15.966	0.414	318.5	0.731	0.000	305.4	232.355	OK
S31	FEH (1): 100 years: +45 %: 15 mins: Winter	17.491	15.651	16.139	0.489	296.9	0.863	0.000	287.3	218.559	OK
S25	FEH (1): 100 years: +45 %: 15 mins: Winter	18.017	15.756	16.507	0.751	196.5	1.075	0.000	191.1	166.451	Surcharged
S24	FEH (1): 100 years: +45 %: 15 mins: Winter	17.930	15.836	16.791	0.956	193.4	1.368	0.000	186.3	161.966	Surcharged
S22	FEH (1): 100 years: +45 %: 30 mins: Winter	17.526	15.960	16.992	1.032	142.6	1.477	0.000	142.4	173.875	Surcharged
S18	FEH (1): 100 years: +45 %: 30 mins: Winter	17.652	16.058	17.087	1.030	68.6	1.473	0.000	69.5	85.559	Surcharged
S12	FEH (1): 100 years: +45 %: 30 mins: Winter	17.490	16.138	17.107	0.968	50.9	1.386	0.000	54.6	66.703	Surcharged
S11	FEH (1): 100 years: +45 %: 30 mins: Winter	17.361	16.205	17.114	0.909	42.5	1.301	0.000	45.5	53.019	Surcharged
S9	FEH (1): 100 years: +45 %: 30 mins: Winter	17.409	16.269	17.115	0.846	16.1	1.210	0.000	9.5	9.307	Surcharged
S35	FEH (1): 100 years: +45 %: 15 mins: Winter	21.772	20.422	20.474	0.052	13.2	0.075	0.000	12.8	6.256	OK
S37	FEH (1): 100 years: +45 %: 15 mins: Winter	20.321	18.318	19.080	0.762	70.7	0.861	0.000	61.2	40.199	Surcharged
S38	FEH (1): 100 years: +45 %: 15 mins: Winter	19.643	17.856	18.811	0.955	100.6	1.081	0.000	91.8	58.452	Surcharged
S48	FEH (1): 100 years: +45 %: 15 mins: Winter	18.125	16.605	17.558	0.953	231.9	1.363	0.000	227.7	133.251	Surcharged
S36	FEH (1): 100 years: +45 %: 15 mins: Winter	19.649	18.599	19.649	1.050	37.4	1.693	0.191	29.7	17.339	Flood
S39	FEH (1): 100 years: +45 %: 15 mins: Winter	19.299	18.249	18.410	0.161	10.2	0.230	0.000	1.8	2.864	Surcharged
S40	FEH (1): 100 years: +45 %: 15 mins: Winter	19.143	17.830	18.406	0.577	28.1	0.825	0.000	19.6	15.882	Surcharged
S41	FEH (1): 100 years: +45 %: 15 mins: Winter	18.948	17.364	18.182	0.818	179.6	1.171	0.000	172.3	105.771	Surcharged

S34	FEH (1): 100 years: +45 %: 15 mins: Winter	22.508	21.458	21.528	0.070	13.6	0.101	0.000	13.2	6.275	OK
S54	FEH (1): 100 years: +45 %: 15 mins: Winter	19.935	18.585	18.632	0.047	17.2	0.068	0.000	17.1	7.955	OK
S53	FEH (1): 100 years: +45 %: 15 mins: Winter	20.749	19.399	19.449	0.050	20.4	0.072	0.000	20.3	9.443	OK
S29	FEH (1): 100 years: +45 %: 15 mins: Winter	18.557	17.507	17.634	0.128	15.2	0.183	0.000	14.3	7.041	OK
S30	FEH (1): 100 years: +45 %: 15 mins: Winter	18.717	17.330	17.419	0.089	43.5	0.127	0.000	42.9	23.506	OK
S59	FEH (1): 100 years: +45 %: 15 mins: Winter	20.588	18.832	19.092	0.260	189.4	0.372	0.000	166.6	94.738	OK
S62	FEH (1): 100 years: +45 %: 15 mins: Winter	19.983	18.633	19.987	1.354	57.3	6.374	4.442	27.1	26.196	Flood
S67	FEH (1): 100 years: +45 %: 15 mins: Winter	19.851	18.501	19.855	1.354	59.7	5.944	4.012	37.9	43.819	Flood
S51	FEH (1): 100 years: +45 %: 15 mins: Winter	21.081	19.731	19.779	0.048	18.6	0.069	0.000	18.5	8.610	OK
S52	FEH (1): 100 years: +45 %: 15 mins: Winter	19.898	18.005	18.307	0.303	38.3	0.433	0.000	35.0	24.601	Surcharged
S50	FEH (1): 100 years: +45 %: 15 mins: Winter	21.912	20.562	20.610	0.048	18.7	0.069	0.000	18.5	8.627	OK
S66	FEH (1): 100 years: +45 %: 30 mins: Winter	20.223	18.873	20.227	1.354	27.2	5.570	3.638	22.6	32.371	Flood
S65	FEH (1): 100 years: +45 %: 15 mins: Winter	20.373	19.023	20.375	1.352	21.7	3.972	2.040	15.0	15.864	Flood
S64	FEH (1): 100 years: +45 %: 30 mins: Winter	20.425	19.075	20.425	1.350	14.9	1.996	0.064	14.5	13.769	Flood
S68	FEH (1): 100 years: +45 %: 15 mins: Winter	18.787	17.362	18.426	1.064	146.4	1.523	0.000	146.0	130.600	Surcharged
S63	FEH (1): 100 years: +45 %: 15 mins: Winter	19.089	17.664	19.092	1.428	124.0	5.328	3.289	86.3	71.888	Flood
S61	FEH (1): 100 years: +45 %: 15 mins: Winter	19.592	18.167	19.285	1.118	11.0	1.600	0.000	10.7	5.539	Surcharged
S60	FEH (1): 100 years: +45 %: 15 mins: Winter	20.441	19.016	19.054	0.038	4.5	0.054	0.000	4.3	2.061	OK
S57	FEH (1): 100 years: +45 %: 15 mins: Winter	21.708	20.358	20.442	0.084	22.7	0.120	0.000	22.4	10.445	OK
S56	FEH (1): 100 years: +45 %: 15 mins: Winter	20.682	19.182	20.028	0.846	80.7	1.210	0.000	71.9	37.387	Surcharged
S58	FEH (1): 100 years: +45 %: 15 mins: Winter	21.365	19.007	19.830	0.823	143.1	1.178	0.000	136.0	70.399	Surcharged

S10	FEH (1): 100 years: +45 %: 15 mins: Winter	17.122	16.307	17.131	0.825	42.0	9.771	8.604	36.5	20.647	Flood
S13	FEH (1): 100 years: +45 %: 30 mins: Winter	17.272	16.222	17.250	1.028	18.2	1.471	0.000	17.8	16.819	Surcharged
S23	FEH (1): 100 years: +45 %: 15 mins: Winter	17.532	16.482	17.071	0.589	30.7	0.843	0.000	21.0	14.193	Surcharged
S46	FEH (1): 100 years: +45 %: 15 mins: Winter	18.234	17.070	17.297	0.227	32.9	0.325	0.000	30.6	22.018	Surcharged
S45	FEH (1): 100 years: +45 %: 15 mins: Winter	18.346	17.226	17.573	0.347	27.5	0.497	0.000	24.4	17.997	Surcharged
S44	FEH (1): 100 years: +45 %: 15 mins: Winter	18.554	17.455	17.827	0.372	23.2	0.533	0.000	19.9	14.444	Surcharged
S43	FEH (1): 100 years: +45 %: 15 mins: Winter	18.708	17.641	17.960	0.319	18.8	0.456	0.000	15.8	10.990	Surcharged
S42	FEH (1): 100 years: +45 %: 15 mins: Winter	18.927	17.877	18.029	0.152	15.1	0.218	0.000	10.0	6.964	Surcharged
S33	FEH (1): 100 years: +45 %: 240 mins: Winter	16.363	15.500	15.961	0.461	90.3	0.815	0.000	90.2	512.668	OK
S21	FEH (1): 100 years: +45 %: 15 mins: Winter	17.167	16.070	17.168	1.098	33.5	2.826	1.256	26.2	15.487	Flood
S28	FEH (1): 100 years: +45 %: 15 mins: Winter	19.084	17.825	18.028	0.203	27.8	0.290	0.000	25.3	14.685	Surcharged
S27	FEH (1): 100 years: +45 %: 15 mins: Winter	19.180	17.980	18.176	0.196	18.6	0.281	0.000	16.4	9.414	Surcharged
S26	FEH (1): 100 years: +45 %: 15 mins: Winter	19.159	18.109	18.207	0.098	12.7	0.140	0.000	10.9	5.868	OK
S2	FEH (1): 100 years: +45 %: 30 mins: Winter	18.924	17.874	18.047	0.173	17.8	0.248	0.000	17.3	16.420	Surcharged
S3	FEH (1): 100 years: +45 %: 30 mins: Winter	18.271	16.972	17.733	0.761	20.4	1.089	0.000	17.9	19.282	Surcharged
S8	FEH (1): 100 years: +45 %: 30 mins: Winter	17.930	16.439	17.584	1.145	26.9	1.638	0.000	28.6	38.991	Surcharged
S20	FEH (1): 100 years: +45 %: 30 mins: Winter	17.644	16.021	17.065	1.044	106.5	1.494	0.000	106.6	136.436	Surcharged
S6	FEH (1): 100 years: +45 %: 30 mins: Winter	17.911	16.540	17.609	1.069	17.2	1.530	0.000	19.6	19.689	Surcharged
S5	FEH (1): 100 years: +45 %: 30 mins: Summer	17.755	16.645	17.620	0.975	13.0	1.395	0.000	14.0	15.079	Surcharged
S4	FEH (1): 100 years: +45 %: 15 mins: Winter	17.613	16.763	17.617	0.853	17.3	4.688	3.472	18.0	8.909	Flood
S71	FEH (1): 100 years: +45 %: 15 mins: Winter	18.234	16.353	17.299	0.946	155.4	1.354	0.000	160.1	159.151	Surcharged

S70	FEH (1): 100 years: +45 %: 15 mins: Winter	17.866	16.461	17.607	1.146	149.3	1.640	0.000	149.5	135.353	Surcharged
S69	FEH (1): 100 years: +45 %: 15 mins: Winter	17.787	16.530	17.801	1.271	149.3	15.570	13.771	149.3	131.965	Flood
S102	FEH (1): 100 years: +45 %: 15 mins: Winter	19.111	18.061	18.170	0.109	17.5	0.156	0.000	14.6	8.091	OK
S103	FEH (1): 100 years: +45 %: 15 mins: Winter	18.699	17.665	18.014	0.349	29.8	0.499	0.000	25.9	15.106	Surcharged
S104	FEH (1): 100 years: +45 %: 15 mins: Winter	18.310	17.260	17.329	0.069	25.9	0.098	0.000	20.1	15.124	OK
MDSuds feature E	FEH (1): 100 years: +45 %: 960 mins: Winter	17.157	14.800	14.901	0.101	32.3	0.000	0.000	32.3	2417.488	OK
MDFlow Control	FEH (1): 100 years: +45 %: 240 mins: Winter	16.200	15.102	15.956	0.854	32.5	0.965	0.000	32.3	742.197	Surcharged
MD39	FEH (1): 100 years: +45 %: 15 mins: Winter	17.810	15.973	16.400	0.427	48.4	0.482	0.000	41.6	30.360	Surcharged
MD38	FEH (1): 100 years: +45 %: 30 mins: Winter	17.919	16.135	16.462	0.327	28.4	0.369	0.000	27.6	26.545	Surcharged
MD37	FEH (1): 100 years: +45 %: 30 mins: Winter	17.562	16.278	16.473	0.195	11.1	0.221	0.000	10.8	10.300	OK
MD40	FEH (1): 100 years: +45 %: 15 mins: Winter	18.005	15.385	16.244	0.859	814.2	0.971	0.000	805.8	583.554	Surcharged
MD36	FEH (1): 100 years: +45 %: 15 mins: Winter	18.328	15.432	16.409	0.976	525.1	1.725	0.000	506.1	399.057	Surcharged
MD35	FEH (1): 100 years: +45 %: 15 mins: Winter	18.670	15.494	16.558	1.064	514.2	1.203	0.000	499.0	390.155	Surcharged
MD34	FEH (1): 100 years: +45 %: 15 mins: Winter	18.958	15.541	16.689	1.148	501.3	2.028	0.000	483.0	377.823	Surcharged
MD33	FEH (1): 100 years: +45 %: 15 mins: Winter	19.226	15.598	16.848	1.249	483.6	2.207	0.000	463.7	362.086	Surcharged
MD32	FEH (1): 100 years: +45 %: 15 mins: Winter	18.990	15.810	16.941	1.130	220.7	1.997	0.000	214.0	207.296	Surcharged
MD30	FEH (1): 100 years: +45 %: 15 mins: Winter	17.848	16.423	17.106	0.683	26.8	0.773	0.000	21.3	12.377	Surcharged
MD31	FEH (1): 100 years: +45 %: 15 mins: Winter	18.115	15.936	17.077	1.141	206.1	2.016	0.000	196.3	195.861	Surcharged
SWMH70	FEH (1): 100 years: +45 %: 15 mins: Winter	19.500	16.120	17.924	1.804	261.4	2.582	0.000	258.2	144.953	Surcharged
S47	FEH (1): 100 years: +45 %: 15 mins: Summer	18.150	16.490	16.722	0.232	245.4	0.333	0.000	243.1	138.133	OK
S105	FEH (1): 100 years: +45 %: 15 mins: Winter	18.046	16.407	17.454	1.047	149.5	1.498	0.000	149.8	138.199	Surcharged

SWMH69	FEH (1): 100 years: +45 %: 15 mins: Winter	20.380	17.210	18.121	0.911	211.7	1.303	0.000	209.3	119.130	Surcharged
SWMH68	FEH (1): 100 years: +45 %: 15 mins: Winter	21.500	18.020	18.127	0.107	19.4	0.153	0.000	6.9	9.140	OK
SWMH67	FEH (1): 100 years: +45 %: 15 mins: Winter	22.250	19.430	19.441	0.011	0.9	0.015	0.000	0.9	0.442	OK
S49	FEH (1): 100 years: +45 %: 15 mins: Winter	22.709	21.359	21.371	0.012	1.0	0.017	0.000	0.9	0.443	OK
S108	FEH (1): 100 years: +45 %: 15 mins: Winter	19.553	18.203	18.482	0.279	20.0	0.399	0.000	20.7	14.181	Surcharged
S107	FEH (1): 100 years: +45 %: 15 mins: Winter	19.708	18.308	18.660	0.352	24.9	0.504	0.000	20.0	14.147	Surcharged
S106	FEH (1): 100 years: +45 %: 15 mins: Winter	19.789	18.439	18.766	0.326	20.1	0.467	0.000	14.5	9.377	Surcharged

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

FEH (1): 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. 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 (%)
Basin E	FEH (1): 2 years: +0 %: 240 mins: Winter	15.424	15.424	0.224	0.224	102.2	383.413	0.000	0.000	27.8	455.967		85.095

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Status
OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

FEH (1): 30 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. 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 (%)
Basin E	FEH (1): 30 years: +40 %: 240 mins: Winter	15.795	15.795	0.595	0.595	255.8	1109.955	0.000	0.000	32.4	767.311		56.850

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Status
OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

FEH (1): 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. 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 (%)
Basin E	FEH (1): 100 years: +45 %: 240 mins: Winter	15.961	15.961	0.761	0.761	322.5	1477.640	0.000	0.000	32.5	743.087	120	42.556

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 1	Motion: 84 North Street Guildford GU1 4AU		

Status
OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

FEH (1): 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S78	FEH (1): 2 years: +0 %: 15 mins: Winter	18.278	16.165	16.348	0.183	48.9	0.262	0.000	46.8	24.757	OK
S79	FEH (1): 2 years: +0 %: 15 mins: Winter	17.947	16.077	16.237	0.160	49.0	0.230	0.000	46.8	25.716	OK
S95	FEH (1): 2 years: +0 %: 15 mins: Winter	18.632	16.602	16.824	0.222	154.2	0.392	0.000	147.0	79.937	OK
S94	FEH (1): 2 years: +0 %: 15 mins: Winter	19.118	17.000	17.174	0.174	104.2	0.307	0.000	100.6	55.148	OK
S93	FEH (1): 2 years: +0 %: 15 mins: Winter	19.513	18.423	18.552	0.129	41.2	0.185	0.000	39.0	21.417	OK
S92	FEH (1): 2 years: +0 %: 15 mins: Winter	19.727	18.632	18.757	0.126	35.4	0.180	0.000	34.4	18.262	OK
S91	FEH (1): 2 years: +0 %: 15 mins: Winter	19.957	18.792	18.915	0.123	28.3	0.176	0.000	27.6	14.685	OK
S90	FEH (1): 2 years: +0 %: 15 mins: Winter	20.202	19.139	19.219	0.081	12.7	0.116	0.000	12.0	5.963	OK
S89	FEH (1): 2 years: +0 %: 15 mins: Winter	20.547	19.497	19.544	0.047	5.2	0.068	0.000	5.0	2.398	OK
S88	FEH (1): 2 years: +0 %: 15 mins: Winter	20.127	19.078	19.179	0.101	12.9	0.144	0.000	10.6	6.124	OK
S87	FEH (1): 2 years: +0 %: 15 mins: Winter	20.287	19.237	19.261	0.024	1.0	0.034	0.000	0.9	0.440	OK
S86	FEH (1): 2 years: +0 %: 15 mins: Winter	20.535	19.485	19.533	0.049	4.6	0.070	0.000	4.3	2.128	OK
S74	FEH (1): 2 years: +0 %: 15 mins: Winter	18.662	17.265	17.337	0.072	18.6	0.103	0.000	17.6	8.921	OK
S73	FEH (1): 2 years: +0 %: 15 mins: Winter	19.201	18.030	18.091	0.061	10.7	0.087	0.000	10.1	5.008	OK
S84	FEH (1): 2 years: +0 %: 15 mins: Winter	19.486	17.491	17.632	0.141	47.4	0.202	0.000	46.6	24.688	OK
S82	FEH (1): 2 years: +0 %: 15 mins: Winter	18.889	17.839	17.985	0.146	39.4	0.209	0.000	35.1	18.834	OK
S81	FEH (1): 2 years: +0 %: 15 mins: Winter	19.832	18.782	18.855	0.073	10.1	0.104	0.000	8.6	4.651	OK

S83	FEH (1): 2 years: +0 %: 15 mins: Winter	19.996	18.707	18.758	0.051	7.1	0.073	0.000	6.8	3.280	OK
S85	FEH (1): 2 years: +0 %: 15 mins: Winter	19.237	17.391	17.496	0.105	50.4	0.150	0.000	49.4	26.459	OK
S72	FEH (1): 2 years: +0 %: 15 mins: Winter	19.749	18.699	18.739	0.041	5.3	0.059	0.000	5.1	2.432	OK
S77	FEH (1): 2 years: +0 %: 15 mins: Winter	18.650	16.516	16.621	0.105	19.2	0.150	0.000	17.1	9.288	OK
S76	FEH (1): 2 years: +0 %: 15 mins: Winter	19.106	16.690	16.791	0.101	15.7	0.144	0.000	15.0	7.365	OK
S75	FEH (1): 2 years: +0 %: 15 mins: Winter	20.047	18.539	18.579	0.040	9.1	0.057	0.000	8.9	4.196	OK
S97	FEH (1): 2 years: +0 %: 15 mins: Winter	17.465	15.798	16.032	0.234	144.0	0.334	0.000	133.4	81.790	OK
S96	FEH (1): 2 years: +0 %: 15 mins: Winter	18.007	16.362	16.561	0.199	151.4	0.352	0.000	144.0	81.918	OK
S80	FEH (1): 2 years: +0 %: 15 mins: Winter	17.965	16.055	16.178	0.123	54.6	0.176	0.000	53.2	29.761	OK
S99	FEH (1): 2 years: +0 %: 15 mins: Winter	18.021	16.971	17.025	0.054	4.2	0.077	0.000	4.0	1.924	OK
S100	FEH (1): 2 years: +0 %: 15 mins: Winter	18.135	16.843	16.920	0.077	7.4	0.110	0.000	6.9	3.511	OK
S101	FEH (1): 2 years: +0 %: 15 mins: Winter	18.095	16.680	16.727	0.047	8.1	0.068	0.000	7.8	4.068	OK
MDS	FEH (1): 2 years: +0 %: 180 mins: Winter	15.500	14.738	14.809	0.071	18.4	0.000	0.000	18.4	287.063	OK
SFlow MDControl	FEH (1): 2 years: +0 %: 180 mins: Winter	16.508	15.300	15.684	0.384	18.4	0.434	0.000	18.4	287.135	Surcharged
MDS43	FEH (1): 2 years: +0 %: 15 mins: Winter	17.854	15.681	15.848	0.167	66.8	0.239	0.000	61.1	36.601	OK
MDS41	FEH (1): 2 years: +0 %: 15 mins: Winter	17.598	16.173	16.239	0.066	9.9	0.075	0.000	9.5	4.576	OK
MDS42	FEH (1): 2 years: +0 %: 15 mins: Winter	17.699	15.766	15.940	0.174	67.1	0.250	0.000	65.7	36.378	OK
MDS46	FEH (1): 2 years: +0 %: 15 mins: Winter	16.916	15.779	15.886	0.107	16.7	0.121	0.000	12.4	7.779	OK
MDS47	FEH (1): 2 years: +0 %: 15 mins: Winter	16.710	15.595	15.872	0.277	159.2	0.490	0.000	147.5	99.681	OK
MDS44	FEH (1): 2 years: +0 %: 15 mins: Winter	17.763	16.338	16.429	0.091	20.6	0.103	0.000	19.7	9.532	OK
MDS45	FEH (1): 2 years: +0 %: 15 mins: Winter	17.080	15.618	15.942	0.324	155.6	0.573	0.000	146.8	92.255	OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

FEH (1): 30 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S78	FEH (1): 30 years: +40 %: 15 mins: Winter	18.278	16.165	16.565	0.400	138.8	0.573	0.000	131.4	71.948	Surcharged
S79	FEH (1): 30 years: +40 %: 15 mins: Winter	17.947	16.077	16.402	0.325	137.7	0.465	0.000	133.3	74.832	OK
S95	FEH (1): 30 years: +40 %: 15 mins: Winter	18.632	16.602	17.076	0.474	421.5	0.838	0.000	388.4	232.404	OK
S94	FEH (1): 30 years: +40 %: 15 mins: Winter	19.118	17.000	17.311	0.311	267.9	0.550	0.000	265.9	160.583	OK
S93	FEH (1): 30 years: +40 %: 15 mins: Winter	19.513	18.423	18.979	0.556	88.0	0.796	0.000	83.3	62.288	Surcharged
S92	FEH (1): 30 years: +40 %: 15 mins: Winter	19.727	18.632	19.250	0.618	73.8	0.885	0.000	68.1	53.112	Surcharged
S91	FEH (1): 30 years: +40 %: 15 mins: Winter	19.957	18.792	19.418	0.626	57.5	0.896	0.000	57.1	42.731	Surcharged
S90	FEH (1): 30 years: +40 %: 15 mins: Winter	20.202	19.139	19.715	0.577	30.5	0.825	0.000	23.4	17.213	Surcharged
S89	FEH (1): 30 years: +40 %: 15 mins: Winter	20.547	19.497	19.769	0.271	15.0	0.388	0.000	10.5	6.936	Surcharged
S88	FEH (1): 30 years: +40 %: 15 mins: Winter	20.127	19.078	19.907	0.830	27.7	1.187	0.000	24.6	18.622	Surcharged
S87	FEH (1): 30 years: +40 %: 15 mins: Winter	20.287	19.237	19.932	0.695	5.7	0.995	0.000	5.2	2.034	Surcharged
S86	FEH (1): 30 years: +40 %: 15 mins: Winter	20.535	19.485	19.991	0.506	13.4	0.724	0.000	8.4	6.153	Surcharged
S74	FEH (1): 30 years: +40 %: 15 mins: Winter	18.662	17.265	17.395	0.130	53.7	0.186	0.000	52.7	25.801	OK
S73	FEH (1): 30 years: +40 %: 15 mins: Winter	19.201	18.030	18.157	0.127	31.1	0.182	0.000	29.2	14.535	OK
S84	FEH (1): 30 years: +40 %: 15 mins: Winter	19.486	17.491	17.751	0.260	132.3	0.372	0.000	129.2	71.873	OK
S82	FEH (1): 30 years: +40 %: 15 mins: Winter	18.889	17.839	18.281	0.443	109.4	0.633	0.000	96.4	54.871	Surcharged
S81	FEH (1): 30 years: +40 %: 15 mins: Winter	19.832	18.782	19.198	0.416	29.3	0.595	0.000	20.3	13.707	Surcharged

S83	FEH (1): 30 years: +40 %: 15 mins: Winter	19.996	18.707	18.804	0.097	20.6	0.139	0.000	19.8	9.520	OK
S85	FEH (1): 30 years: +40 %: 15 mins: Winter	19.237	17.391	17.586	0.195	140.4	0.280	0.000	138.6	77.001	OK
S72	FEH (1): 30 years: +40 %: 15 mins: Winter	19.749	18.699	18.771	0.073	15.2	0.104	0.000	14.9	7.053	OK
S77	FEH (1): 30 years: +40 %: 15 mins: Winter	18.650	16.516	16.820	0.304	50.5	0.435	0.000	45.0	27.100	Surcharged
S76	FEH (1): 30 years: +40 %: 15 mins: Winter	19.106	16.690	17.010	0.320	45.9	0.458	0.000	38.3	21.315	Surcharged
S75	FEH (1): 30 years: +40 %: 15 mins: Winter	20.047	18.539	18.608	0.069	26.3	0.099	0.000	26.1	12.149	OK
S97	FEH (1): 30 years: +40 %: 15 mins: Winter	17.465	15.798	16.583	0.785	343.6	1.124	0.000	335.9	237.628	Surcharged
S96	FEH (1): 30 years: +40 %: 15 mins: Winter	18.007	16.362	16.897	0.535	401.2	0.945	0.000	343.6	238.193	Surcharged
S80	FEH (1): 30 years: +40 %: 15 mins: Winter	17.965	16.055	16.311	0.256	154.6	0.366	0.000	152.0	86.648	OK
S99	FEH (1): 30 years: +40 %: 15 mins: Winter	18.021	16.971	17.100	0.129	12.1	0.185	0.000	9.1	5.588	OK
S100	FEH (1): 30 years: +40 %: 15 mins: Winter	18.135	16.843	17.043	0.200	19.2	0.286	0.000	17.9	10.241	Surcharged
S101	FEH (1): 30 years: +40 %: 15 mins: Winter	18.095	16.680	16.767	0.087	21.5	0.125	0.000	21.2	11.861	OK
MDS	FEH (1): 30 years: +40 %: 720 mins: Winter	15.500	14.738	14.809	0.071	18.4	0.000	0.000	18.4	1106.437	OK
SFlow MDControl	FEH (1): 30 years: +40 %: 240 mins: Winter	16.508	15.300	16.169	0.869	18.6	0.983	0.000	18.4	431.474	Surcharged
MDS43	FEH (1): 30 years: +40 %: 240 mins: Winter	17.854	15.681	16.176	0.495	41.8	0.709	0.000	40.4	236.456	Surcharged
MDS41	FEH (1): 30 years: +40 %: 15 mins: Winter	17.598	16.173	16.297	0.124	28.7	0.140	0.000	28.0	13.203	OK
MDS42	FEH (1): 30 years: +40 %: 240 mins: Winter	17.699	15.766	16.176	0.410	41.4	0.587	0.000	41.2	236.503	OK
MDS46	FEH (1): 30 years: +40 %: 15 mins: Summer	16.916	15.779	16.352	0.573	46.1	0.648	0.000	47.1	20.002	Surcharged
MDS47	FEH (1): 30 years: +40 %: 15 mins: Winter	16.710	15.595	16.260	0.665	440.2	1.175	0.000	437.7	282.426	Surcharged
MDS44	FEH (1): 30 years: +40 %: 15 mins: Winter	17.763	16.338	17.119	0.781	59.8	0.884	0.000	53.6	27.564	Surcharged
MDS45	FEH (1): 30 years: +40 %: 15 mins: Winter	17.080	15.618	16.416	0.798	396.9	1.411	0.000	393.4	265.216	Surcharged

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Junctions Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

FEH (1): 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Depth

Junction	Storm Event	Cover Level (m)	Invert Level (m)	Max. Level (m)	Max. Depth (m)	Max. Inflow (L/s)	Max. Resident Volume (m³)	Max. Flooded Volume (m³)	Max. Outflow (L/s)	Total Discharge Volume (m³)	Status
S78	FEH (1): 100 years: +45 %: 15 mins: Winter	18.278	16.165	16.792	0.627	174.4	0.897	0.000	168.2	92.772	Surcharged
S79	FEH (1): 100 years: +45 %: 15 mins: Winter	17.947	16.077	16.522	0.445	176.4	0.636	0.000	173.7	96.509	Surcharged
S95	FEH (1): 100 years: +45 %: 15 mins: Winter	18.632	16.602	17.796	1.194	456.5	2.110	0.000	439.8	299.607	Surcharged
S94	FEH (1): 100 years: +45 %: 15 mins: Winter	19.118	17.000	17.983	0.983	295.7	1.737	0.000	255.9	207.021	Surcharged
S93	FEH (1): 100 years: +45 %: 15 mins: Winter	19.513	18.423	19.274	0.851	104.2	1.218	0.000	97.6	80.331	Surcharged
S92	FEH (1): 100 years: +45 %: 15 mins: Winter	19.727	18.632	19.621	0.989	86.6	1.416	0.000	78.5	68.499	Surcharged
S91	FEH (1): 100 years: +45 %: 15 mins: Winter	19.957	18.792	19.825	1.033	66.3	1.478	0.000	65.3	55.086	Surcharged
S90	FEH (1): 100 years: +45 %: 15 mins: Winter	20.202	19.139	20.203	1.064	37.5	2.681	1.160	33.9	22.193	Flood
S89	FEH (1): 100 years: +45 %: 30 mins: Winter	20.547	19.497	20.310	0.813	13.0	1.164	0.000	12.6	12.006	Surcharged
S88	FEH (1): 100 years: +45 %: 15 mins: Winter	20.127	19.078	20.132	1.054	36.5	5.966	4.464	25.1	23.911	Flood
S87	FEH (1): 100 years: +45 %: 15 mins: Winter	20.287	19.237	20.136	0.900	9.0	1.287	0.000	7.8	2.577	Surcharged
S86	FEH (1): 100 years: +45 %: 30 mins: Winter	20.535	19.485	20.281	0.796	11.6	1.139	0.000	11.6	10.649	Surcharged
S74	FEH (1): 100 years: +45 %: 15 mins: Winter	18.662	17.265	17.415	0.150	64.8	0.215	0.000	63.9	33.259	OK
S73	FEH (1): 100 years: +45 %: 15 mins: Winter	19.201	18.030	18.336	0.306	40.2	0.438	0.000	33.1	18.725	Surcharged
S84	FEH (1): 100 years: +45 %: 15 mins: Winter	19.486	17.491	18.168	0.678	163.5	0.970	0.000	141.9	92.526	Surcharged
S82	FEH (1): 100 years: +45 %: 15 mins: Winter	18.889	17.839	18.760	0.922	138.2	1.319	0.000	117.2	70.485	Surcharged
S81	FEH (1): 100 years: +45 %: 15 mins: Winter	19.832	18.782	19.832	1.050	37.8	1.726	0.224	28.3	17.688	Flood

S83	FEH (1): 100 years: +45 %: 15 mins: Winter	19.996	18.707	18.825	0.119	26.5	0.170	0.000	25.4	12.172	OK
S85	FEH (1): 100 years: +45 %: 15 mins: Winter	19.237	17.391	18.054	0.663	156.3	0.949	0.000	138.7	99.152	Surcharged
S72	FEH (1): 100 years: +45 %: 15 mins: Winter	19.749	18.699	18.785	0.086	19.6	0.123	0.000	19.3	9.069	OK
S77	FEH (1): 100 years: +45 %: 15 mins: Winter	18.650	16.516	17.208	0.692	65.3	0.991	0.000	57.4	34.936	Surcharged
S76	FEH (1): 100 years: +45 %: 15 mins: Winter	19.106	16.690	17.513	0.823	59.2	1.178	0.000	49.5	27.487	Surcharged
S75	FEH (1): 100 years: +45 %: 15 mins: Winter	20.047	18.539	18.620	0.081	33.9	0.116	0.000	33.6	15.658	OK
S97	FEH (1): 100 years: +45 %: 15 mins: Winter	17.465	15.798	16.963	1.165	440.1	1.667	0.000	429.6	304.672	Surcharged
S96	FEH (1): 100 years: +45 %: 15 mins: Winter	18.007	16.362	17.481	1.119	456.3	1.978	0.000	440.1	307.142	Surcharged
S80	FEH (1): 100 years: +45 %: 15 mins: Winter	17.965	16.055	16.384	0.329	199.0	0.471	0.000	193.9	111.608	OK
S99	FEH (1): 100 years: +45 %: 15 mins: Winter	18.021	16.971	17.289	0.318	15.6	0.455	0.000	11.7	7.199	Surcharged
S100	FEH (1): 100 years: +45 %: 15 mins: Winter	18.135	16.843	17.191	0.349	24.8	0.499	0.000	21.4	13.205	Surcharged
S101	FEH (1): 100 years: +45 %: 15 mins: Winter	18.095	16.680	16.779	0.099	25.9	0.142	0.000	25.4	15.291	OK
MDS	FEH (1): 100 years: +45 %: 360 mins: Winter	15.500	14.738	14.809	0.071	18.4	0.000	0.000	18.4	678.789	OK
SFlow MDControl	FEH (1): 100 years: +45 %: 240 mins: Winter	16.508	15.300	16.355	1.055	18.6	1.193	0.000	18.4	457.769	Surcharged
MDS43	FEH (1): 100 years: +45 %: 240 mins: Winter	17.854	15.681	16.363	0.682	52.2	0.976	0.000	50.6	298.786	Surcharged
MDS41	FEH (1): 100 years: +45 %: 240 mins: Winter	17.598	16.173	16.363	0.190	6.6	0.215	0.000	6.6	37.847	OK
MDS42	FEH (1): 100 years: +45 %: 240 mins: Winter	17.699	15.766	16.363	0.597	52.5	0.855	0.000	51.5	299.369	Surcharged
MDS46	FEH (1): 100 years: +45 %: 15 mins: Winter	16.916	15.779	16.533	0.754	62.5	0.853	0.000	58.5	28.002	Surcharged
MDS47	FEH (1): 100 years: +45 %: 15 mins: Winter	16.710	15.595	16.427	0.832	555.0	1.470	0.000	546.6	360.803	Surcharged
MDS44	FEH (1): 100 years: +45 %: 15 mins: Winter	17.763	16.338	17.708	1.370	77.1	1.550	0.000	67.1	35.529	Surcharged
MDS45	FEH (1): 100 years: +45 %: 15 mins: Winter	17.080	15.618	16.687	1.069	506.2	1.889	0.000	496.4	339.776	Surcharged

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

FEH (1): 2 years: Increase Rainfall (%): +0: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. 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 (%)
Basin A	FEH (1): 2 years: +0 %: 180 mins: Winter	15.693	15.693	0.292	0.292	76.0	208.474	0.000	0.000	18.4	287.312		82.937

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Status
OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

FEH (1): 30 years: Increase Rainfall (%): +40: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. 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 (%)
Basin A	FEH (1): 30 years: +40 %: 240 mins: Winter	16.176	16.176	0.775	0.775	150.9	668.977	0.000	0.000	18.6	432.276	65	45.247

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Status
OK

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
	Designed by: Chris Gray	Checked by:	Approved By:
Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

FEH (1): 100 years: Increase Rainfall (%): +45: Critical Storm Per Item: Rank By: Max. Avg. Depth

Stormwater Control	Storm Event	Max. US Level (m)	Max. DS Level (m)	Max. US Depth (m)	Max. DS Depth (m)	Max. Inflow (L/s)	Max. 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 (%)
Basin A	FEH (1): 100 years: +45 %: 240 mins: Winter	16.363	16.363	0.962	0.962	189.4	889.893	0.000	0.000	18.6	458.806		27.165

Quobleigh Breach Parcel of Development: One Horton Heath Hampshire	Date: 22/10/2025		
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Report Details: Type: Stormwater Controls Summary Storm Phase: Surface Network 2	Motion: 84 North Street Guildford GU1 4AU		

Status
OK

Appendix E

Indicative Culvert Proposal for Planning

84 North Street
Guildford
GU1 4AU

Tel: 01483 531300
www.motion.co.uk

1.0 Existing Catchments for Section of Ordinary Watercourse to be Culverted

The calculated hydraulic capacity of the existing ditch and the rationale for the proposed 600mm diameter culvert

1.1 Based on a Manning's coefficient (n) of 0.1; an estimated top width of 3.315m; an estimated bottom width of 0.467m; an estimated channel slope of 1 in 100; and estimated side slopes of 1 in 1.104; the estimated flow rate through the existing ditch is calculated to be around 0.68 m/s, and the estimated volumetric flow rate through the existing ditch is calculated to be around 1.67 m^3/s.

1.1 Based on the proposed 1 in 131 slope of the proposed 600mm diameter plastic culvert, the estimated flow rate through the proposed culvert is calculated to be around 2.79 m/s, and the estimated volumetric flow rate through the proposed culvert is calculated to be around 0.79 m^3/s.

1.2 The above results show the estimated flow rate for the proposed 600mm diameter plastic culvert will be four times the estimated flow rate through the existing ditch; however, the estimated volumetric flow rate through the proposed 600mm diameter plastic culvert will be less than half that of the existing ditch.

1.3 It is concluded that to reduce the risk of blockage, the proposed 600mm diameter of the plastic culvert is appropriate, and the exact type of plastic pipe (e.g. high strength HDPE), and the measures taken to mitigate the increase flow rate at the outfall, can be addressed as part of the full details provided when the application for ordinary watercourse consent is submitted after reserved matters permission is granted.

Confirmation from Eastleigh Borough Council that they are happy with the space available for the proposed culvert between Block A and Block B

1.4 Please see the email in **Appendix A** confirming the proposed 3m easement is acceptable.

How Development Catchment Area A will ensure soft landscaped areas in the ordinary watercourse catchment area can continue to drain to the proposed culverted section of the ordinary watercourse post development e.g. SuDS that drain to the culvert rather than the Strategic SuDS

1.5 With reference to Motions drawing referenced 2103078-0501-P02 [Drainage Strategy], the existing Catchments for Section of Ordinary Watercourse to be Culverted is around 8737m^2. The estimated overall slope of the catchment is calculated to be around 1 in 46; and proposed impermeable area that will drain to Strategic SuDS Features A in this catchment post development is estimated to be around 4680m^2.

1.6 Guidance from Innovyze on runoff coefficients from different surfaces[1] provides a recommended runoff coefficient of 0.18 – 0.22 for heavy soils with Average (2-7%) slopes, and a multiplied frequency adjustment of 1.25 for the 1 in 100-year storm. With this in mind, a runoff coefficient of 0.25 has been selected, resulting in an estimated catchment area of around 1170m^2 (4680/100x25) that should continue to drain to the proposed culverted section of the ordinary watercourse post development.

[1] https://help.innovyze.com/space/infosewer/17467264/Runoff+Coefficient#:~:text=Runoff%20coefficient%20is%20loosely%20defined,ranges%20between%200.0%20and%201.0

1.7 Discussion with the Lead Local Flood Authority confirmed that the pervious pavements within the catchment area can account for 736m^2 of the 1170m^2 on the basis they will provide long term storage and will be unlined with collector pipe(s). 115m^2 of grass swales will drain to both open and culverted sections of the ordinary watercourse post development; and a 105m^2 bioretention area with underdrain will drain to the culverted section of the ordinary watercourse post development. The remaining 215m^2 will be provided by the additional soft landscaped areas around the car parking area serving Block A and Block B which will also be unlined.

2.0 Existing Catchments for Shallow Ditch Removed as Part of the Development

2.1 With regards to the proposal to construct two houses in the location of the existing shallow ditch in the location of Plots 87 and 88, the removal of the existing shallow ditch will have nil detriment in terms of water management and biodiversity as the shallow ditch previously drained an area comprising of impermeable road; parking area and hardstanding area which will be removed as part of the development.

Appendix A

Confirmation from Eastleigh Borough Council that they are happy with the space available for the proposed culvert between Block A and Block B

Chris Gray

From: White, Neil <Neil.White@eastleigh.gov.uk>
Sent: 22 September 2025 16:27
To: Jason Morgans; Chris Gray; Holly Porton
Cc: Thomas, Ziyad; Csaba Czako
Subject: RE: Following on from our OHH meeting Fri afternoon

Hi Jason, Chris and Csaba

I've met with direct services around culvert easement and future maintenance. They would be insisting on a 3m easement for the culvert from the centre line of the pipe, is there any way this can be achieved @Holly Porton @Chris Gray?

With regards to road adoption there is feeling that more roads will be offered adopted with LGR in the future so road to an adoptable standard would be desired, albeit this is not considering parking courtyards or parking spaces.

Kind Regards

Neil White

Horton Heath - Development Planning Manager

Project Delivery - One Horton Heath

023 8068 8305
07423745344

EASTLEIGH BOROUGH COUNCIL

Eastleigh Borough Council | Eastleigh House | Upper Market Street | Eastleigh | SO50 9YN

From: Jason Morgans <jmorgans@motion.co.uk>
Sent: 17 September 2025 16:35
To: White, Neil <Neil.White@eastleigh.gov.uk>; Chris Gray <cgray@motion.co.uk>
Cc: Thomas, Ziyad <Ziyad.Thomas@eastleigh.gov.uk>; Csaba Czako <CCzako@motion.co.uk>
Subject: RE: Following on from our OHH meeting Fri afternoon

Appendix F

RoFSW Extent and Depth and Maximum Extent of Flooding from Reservoirs Maps

Surface Water Flood Risk (Extent)





Surface water map

Yearly chance of flooding

- ○ Extent
- ○ Depth

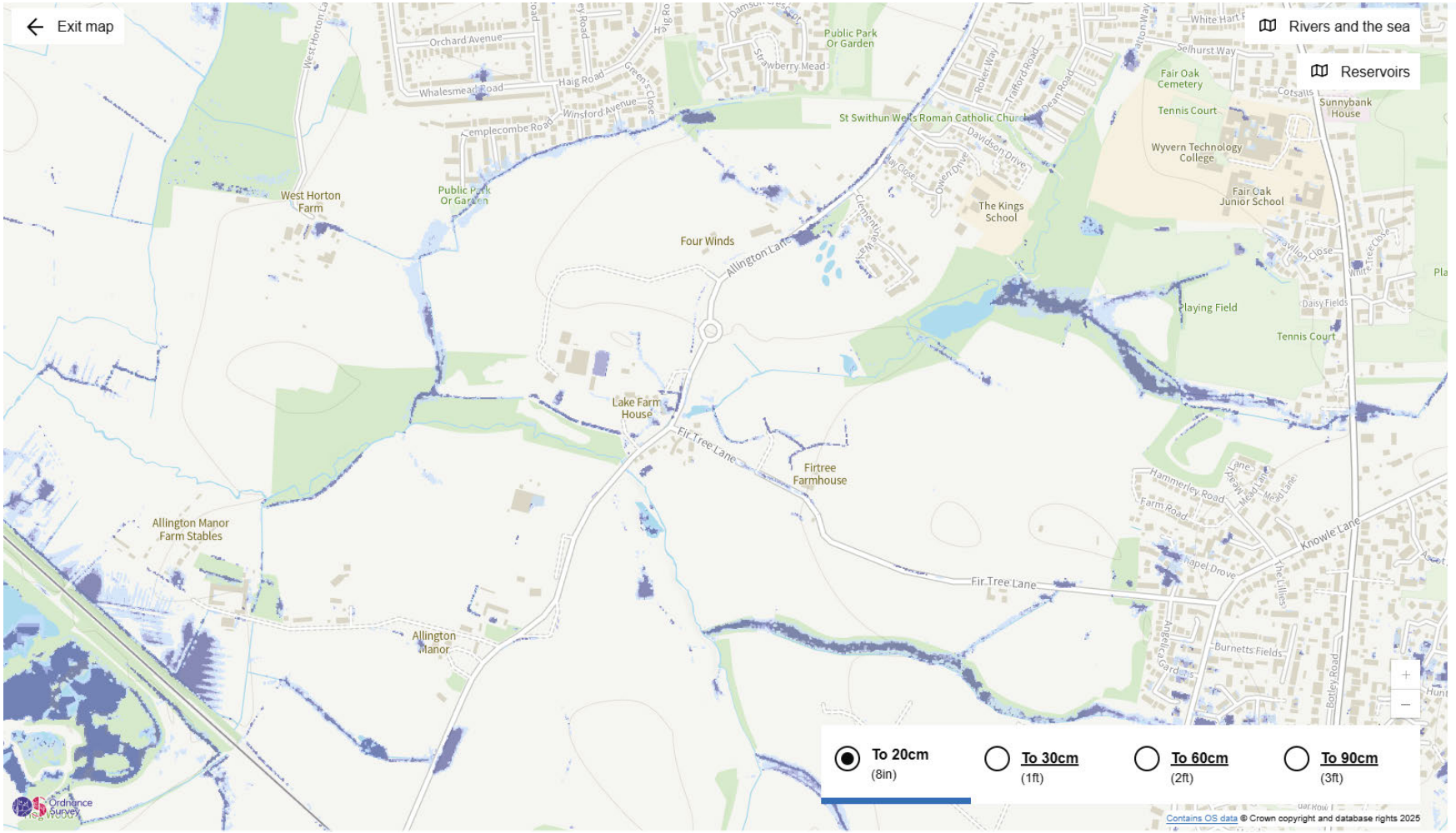
Yearly chance of flooding between 2040 and 2060

- ◉ Extent
  - High chance
    More than 3.3% chance each year
  - Medium chance
    Between 1% and 3.3% chance each year
  - Low chance
    Between 0.1% and 1% chance each year
- ○ Depth

Map details

- ☑ Show flooding

Surface Water Flood Risk (Depth)



Surface water map

Yearly chance of flooding

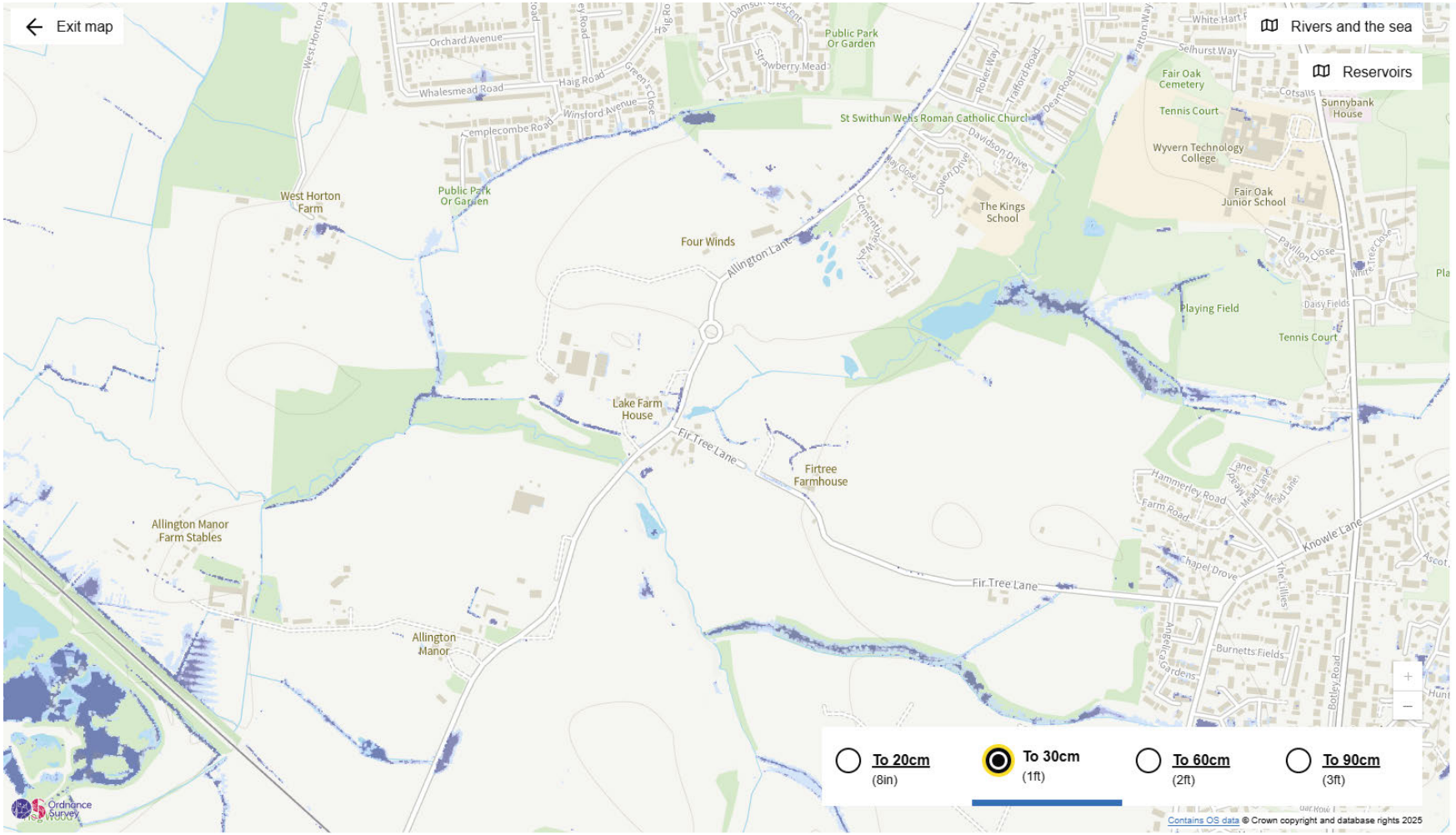
- ○ Extent
- ○ Depth

Yearly chance of flooding between 2040 and 2060

- ○ Extent
- ◉ Depth
  - High chance
    More than 3.3% chance each year
  - Medium chance
    Between 1% and 3.3% chance each year
  - Low chance
    Between 0.1% and 1% chance each year

Map details

- ☑ Show flooding



Surface water map

Yearly chance of flooding

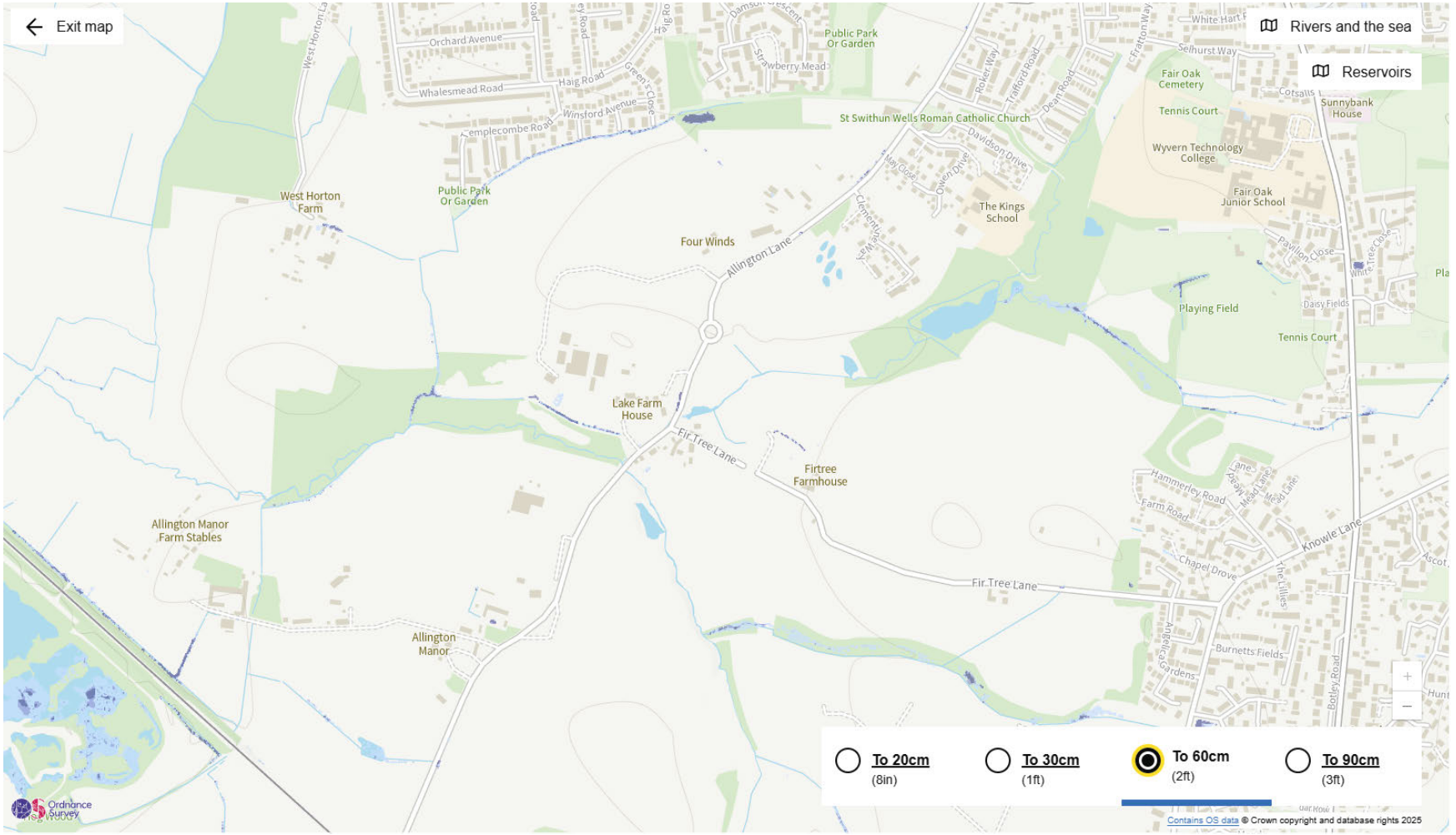
- ○ Extent
- ○ Depth

Yearly chance of flooding between 2040 and 2060

- ○ Extent
- ◉ Depth
  - High chance
    More than 3.3% chance each year
  - Medium chance
    Between 1% and 3.3% chance each year
  - Low chance
    Between 0.1% and 1% chance each year

Map details

- ☑ Show flooding



Surface water map

Yearly chance of flooding

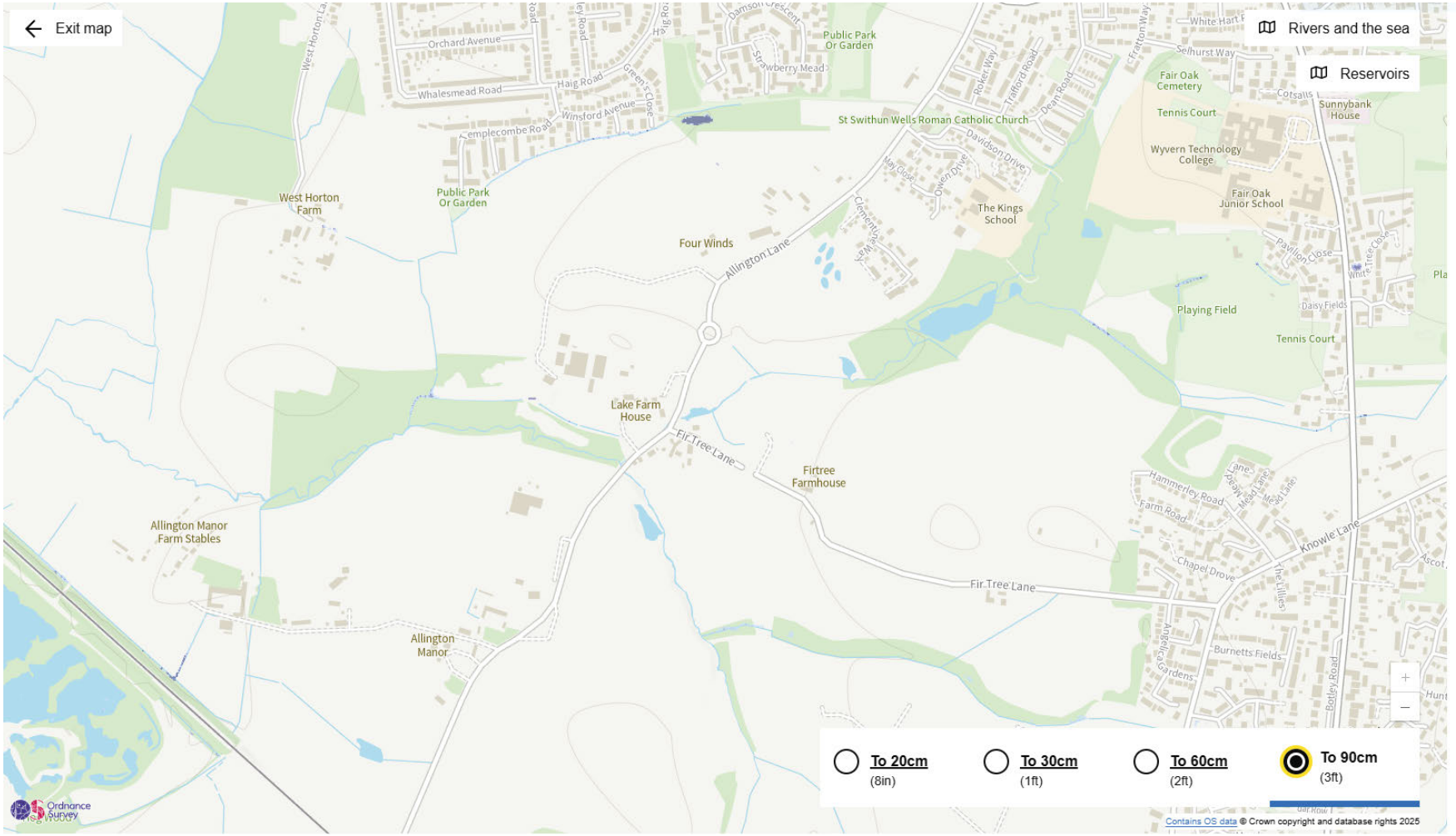
- ○ Extent
- ○ Depth

Yearly chance of flooding between 2040 and 2060

- ○ Extent
- ◉ Depth
  - High chance
    More than 3.3% chance each year
  - Medium chance
    Between 1% and 3.3% chance each year
  - Low chance
    Between 0.1% and 1% chance each year

Map details

- ☑ Show flooding



Surface water map

Yearly chance of flooding

- ○ Extent
- ○ Depth

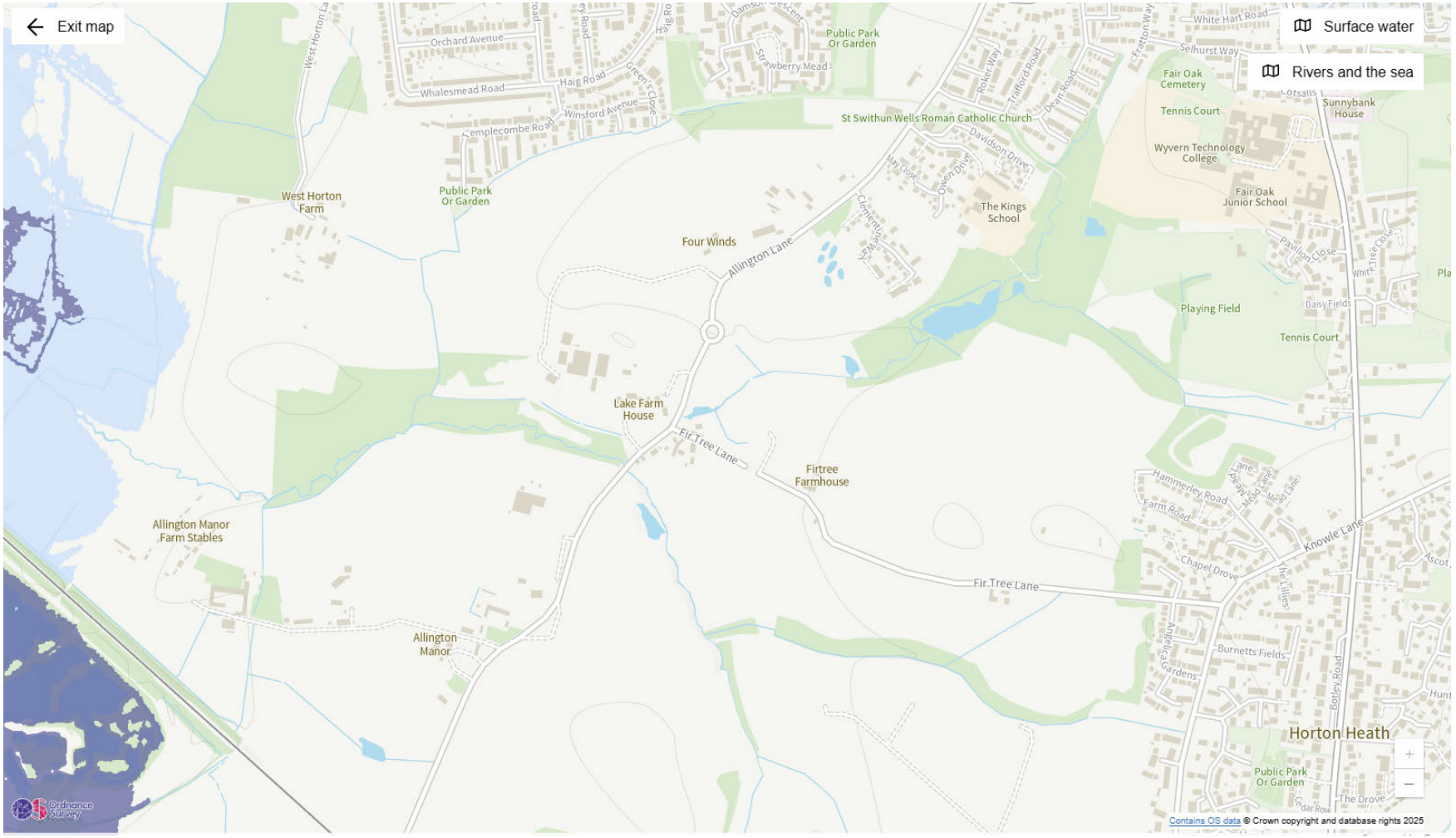
Yearly chance of flooding between 2040 and 2060

- ○ Extent
- ◉ Depth
  - High chance: More than 3.3% chance each year
  - Medium chance: Between 1% and 3.3% chance each year
  - Low chance: Between 0.1% and 1% chance each year

Map details

- ☑ Show flooding

Reservoir Flooding



Appendix G

LLFA Pre Application Information

Site Location:	FIR TREE FARMHOUSE FIR TREE LANE, HORTON HI
Site Reference:	SWP-PRE/2024/0299
Review Date:	15/08/2024
Reviewer:	SR
Authorised:	SR
Total No. Pages	2

Proposal Description:

The proposals are to place 273 residential units on greenfield land either side of Fir Tree Lane linked to the overall One Horton Heath development

Site Background				
Pre-development status		Greenfield		
Modelled Flood Risk		**Historic Flooding**	Y	
Flood Zone 2	Y	Junction of Allington / Fir Tree Lane		Internal flooding due to Surface water
Flood Zone 3	Y	Culvert south of Fir Tree Lane		Culvert Blocked
FMfSW High	Y	Fir Tree Lane (western section)		Rainfall exceeded capacity in drainage ditches
FMfSW Medium	Y	**Watercourses**		
FMfSW Low	Y	Main River	Y	Adjacent to northern and partially adjacent to western boundaries
Groundwater risk zone	M	Ordinary Watercourse	Y	To the north of Fir Tree Lane
Priority Area	Y/N	**Geology**		Wittering Formation

Name of Documents Reviewed	**Document reference No.**
Flood Risk & Drainage Summary	Technical Note 1 dated 31/05/24

Provide link to HCC maps

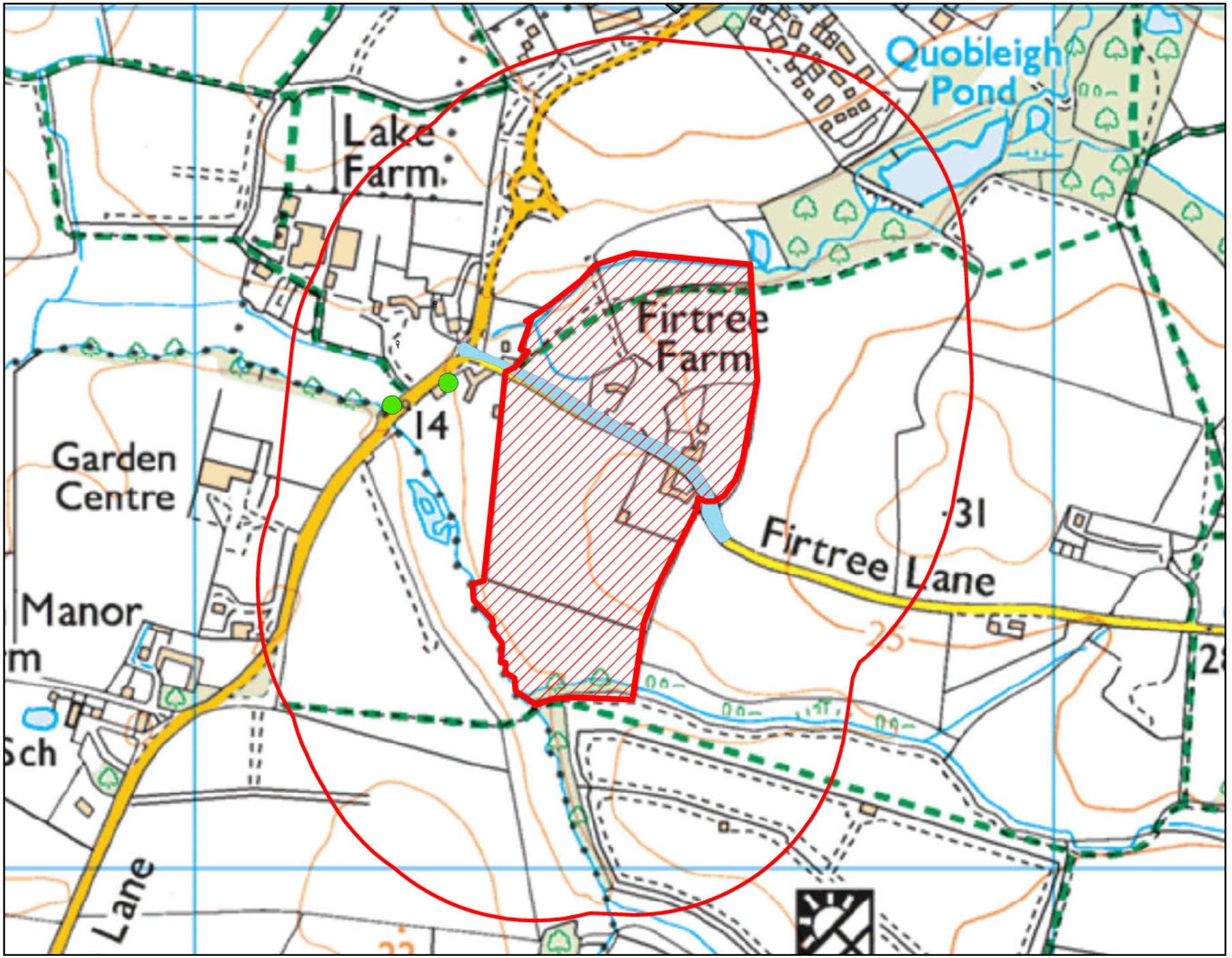
Summary of submission, key points requiring assessment, response to specific developer queries

A Flood Risk Assessment and Drainage Summary has been provided however the level of information does not allow a full assessment to be undertaken. The principles stated are generally acceptable but there are concerns in relation to goundwater levels and the use of infiltration. Additional work also needs to be included in relation to managing the surface water flood risk and presence of ordinary watercourses.
A drainage strategy has been discussed but it is not clear how this will fit within the overall site layout and further detail will be required to be able to provide substantive comments.

Review of Proposals

Information Category		Commentary
Existing site conditions		A topographic survey needs to be provided containing sufficient information to identify key features within and bounding the site, particularly if existing properties or watercourses are on the periphery. This shoud include offsite levels to be able to assess the risk to those dwellings. A flood risk assessment has been provided identifying the current risk of all sources of flooding although it is difficult to understand the potential risk from surface water flooding given the scale of the plan. A site investigation report is required setting out the geology and if infiltration is feasible, testing to BRE365 together with groundwater monitoring / assessment
Site Investigation Report		A site investigation report is required setting out the geology and if infiltration is feasible, testing to BRE365 together with groundwater monitoring / assessment. For chalk areas, the recommended offset between infiltration features and structures needs to be stated based on the chalk grading.
Review of flood risk on site		An assessment of flood risk has been included within the Flood Risk Assessment / Statement. While fluvial flood risk appears to be managed with the overall site layout, it is not clear how the surface water flood risk will be addressed given the high level nature of the plans. If the overland flow routes are linked to an ordinary watercourse, this will need to be retained as an open feature.
Drainage Strategy		A drainage strategy is required to demonstrate how the site is to be drained. This needs to evidence the proposed discharge rate, discharge location and sufficient information on the drainage features to demonstrate it is viable within the site constraints without increasing the risk of flooding. The discharge mechanism needs to demonstrate adherence to the drainage hierarchy. While the table has been provided identifying the strategic basin allocations, it is not clear how flows will be directed towards these features. In addition, the narrative refers to partial infiltration. Given groundwater levels are identified extremely close to surface, this is unlikely to be acceptable unless a 1m clearance to groundwater can be confirmed.
Discharge Rate		It is proposed to discharge at greenfield runoff rates however further information will be required to demonstrate that flows will not exceed the capacity of the basins.
Drawings		Only a site layout plan has been provided. A surface water drainage layout is required showing drainage features of sufficient capacity, in appropriate locations with due regard to flood risk areas, topography, and connectivity to discharge locations. Level information and dimensions should be provided where appropriate
Calculations		Hydraulic calculations are required produced using industry-standard software, demonstrating a suitable storage estimate and that post-development runoff rates and volumes do not exceed pre-development runoff rates and volumes for 1:1, 1:30, 1:100 + climate change. These must be based on network assessment as opposed to source control. These must include an appropriate allowance for urban creep and climate change. Calculations should also be linked to those submitted previously for the strategic basins to demonstrate that the entire drainage system will function as required.
Water Quality		An assessment is required in accordance with the simple index approach. If proprietary treatment systems are proposed these must be supported with manufacturer's specification detailing performance
Exceedance flows		A pre and post development plan is required to indicate overland flow routes based on the topography / built levels and demonstrating flows will not be directed in new locations and affecting properties. Flows within the development must be routed away from new properties. Details of finished floor levels, road camber and kerb heights may be required.
Further permissions required		Culverting of watercourses must be restricted to where access is required only, and consent sought from the relevant authority. Not all ordinary watercourses have been identified at present and the site layout may need to be amended to ensure they are retained. This is particularly important along Fir Tree Lane where there is an existing surface water flow route.
Maintenance		A schedule of maintenance tasks, to include descriptions, frequencies, and the responsible parties for maintaining each part of the drainage system (including any adoption agreements) and any watercourses is required. This should also consider access requirements and any easements necessary

Refer to Planning Guidance for Developers for additional information regarding the specific requirements dependant on type of planning application being applied for



Legend

- 250m buffer
- Site
- EA Recorded Flood Outlines
- Recorded Highway Flooding
- Recorded Highway Flooding in Hampshire
- No Value

Hampshire Flood Enquiries

enq_status_name

- Resolved Flood Enquiry

Historic Flood Information Request

Historic Flooding Information

Eastleigh Borough Council

Fir Tree Farmhouse, Fir Tree Lane

Notes:

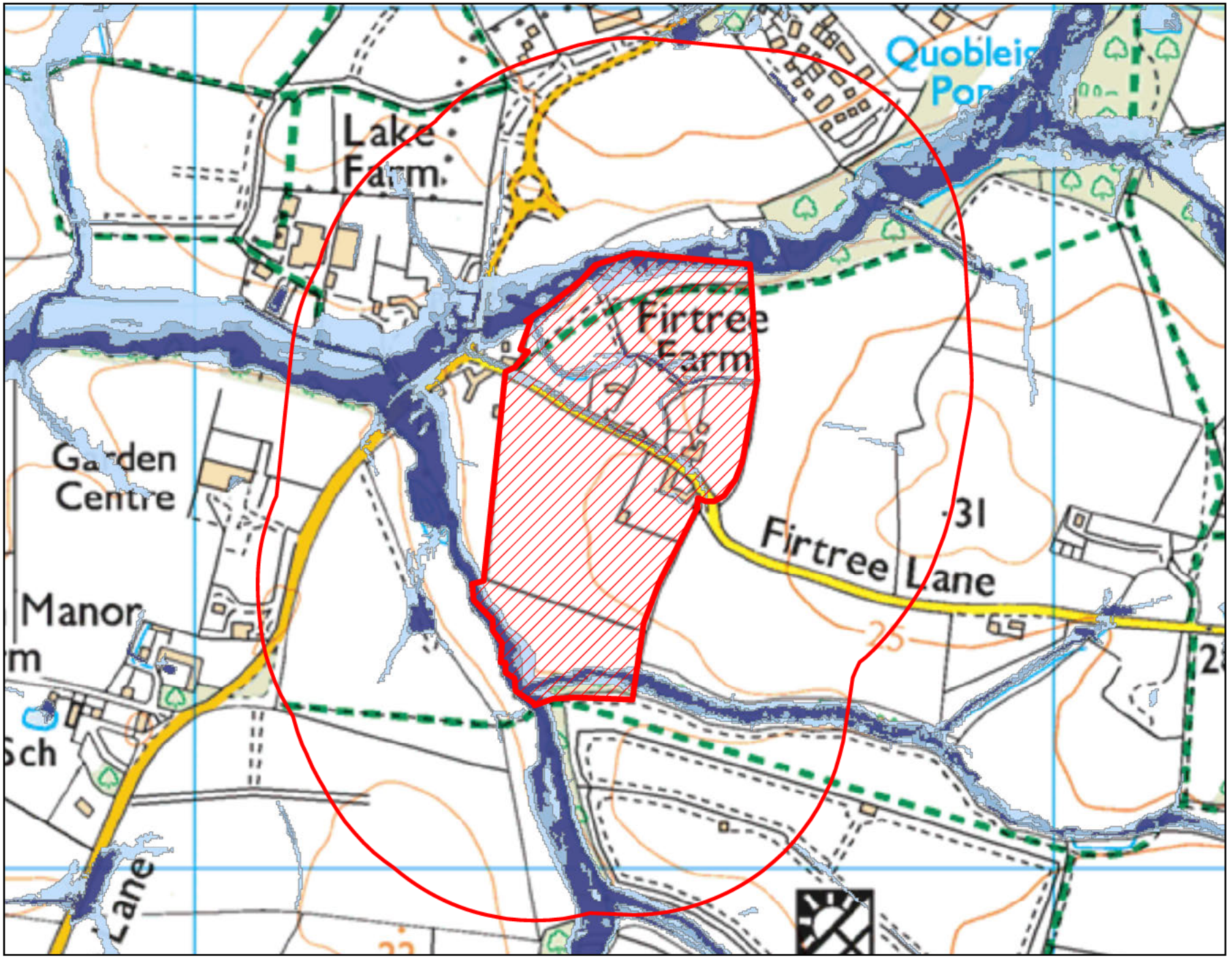
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Date:	10/06/2024	Sheet:	1 of 1
Revision:	1	Initials:	CT

Hampshire County Council



Legend

- 250m buffer
- Site
- Flood Maps for Surface Water (High)
- Flood Maps for Surface Water (Medium)
- Flood Maps for Surface Water (Low)

Historic Flood Information Request

Flood Map for Surface Water

Eastleigh Borough Council

Fir Tree Farmhouse, Fir Tree Lane

Notes:

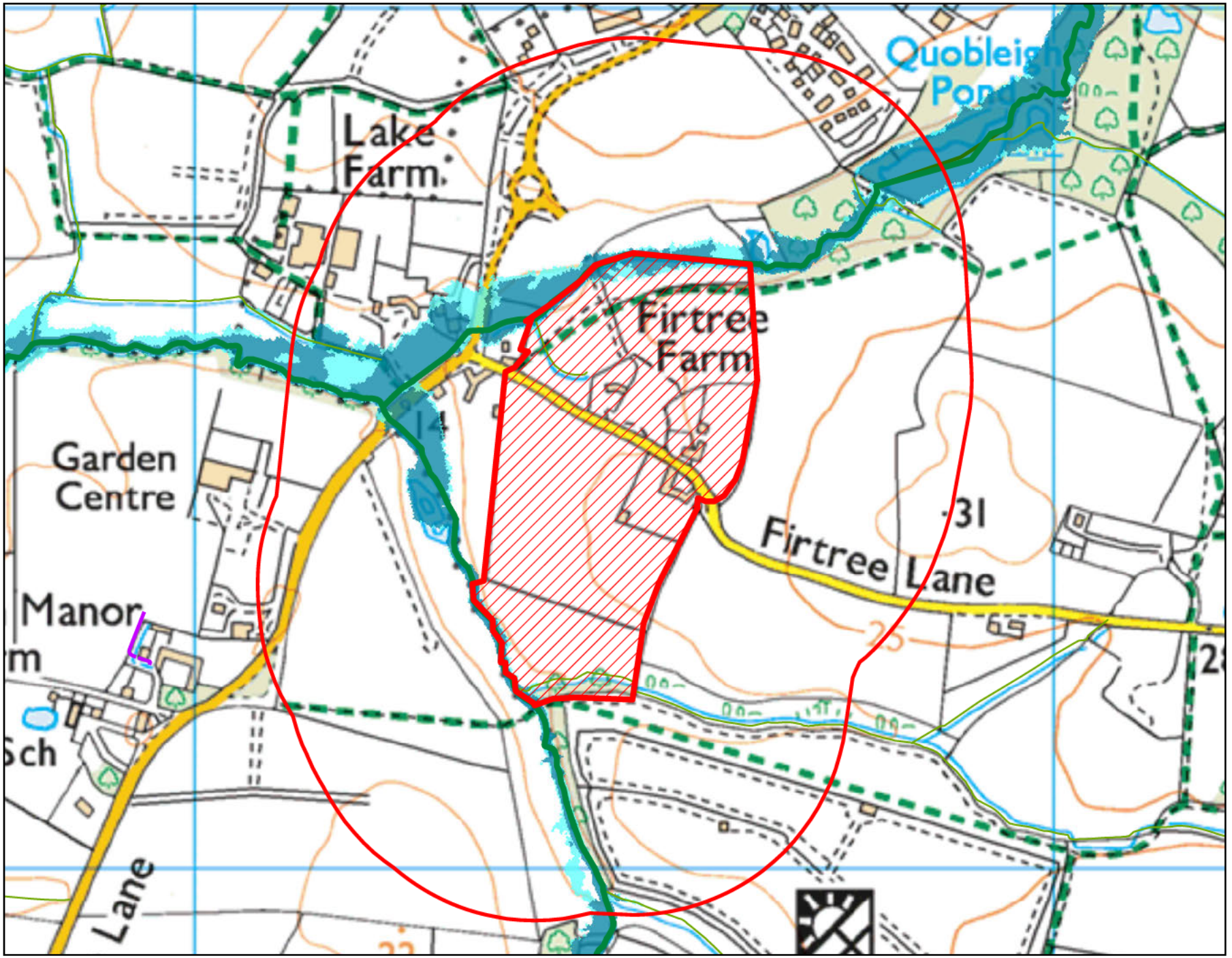
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Date:	10/06/2024	Sheet:	1 of 1
Revision:	1	Initials:	CT

Hampshire County Council



Legend

- 250m buffer
- Site
- Main River (as defined by EA)
- non main river

mainriv

- FRM Indicative Main River
- Detailed River Network - Offline Drainage
- Flood Zone 3
- Flood Zone 2

Historic Flood Information Request

E A Flood Zones and Detailed River Network

Eastleigh Borough Council

Fir Tree Farmhouse, Fir Tree Lane

Notes:

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Date:	10/06/2024	Sheet:	1 of 1
Revision:	1	Initials:	CT

Hampshire County Council

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Chris Gray

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- [redacted] water runoff as part of the hydrological assessment e.g. calculate the existing ordinary watercourse catchment runoff volume and compare to the long-term storage volume provided by unlined pervious parking areas with collector pipes.

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