

**Bellway Homes Ltd**

**Land at Home Farm, Warminster**

**Flood Risk Assessment and Drainage Strategy**

**Report Ref:  
2204791-ACE-XX-XX-RP-C-0501**

**April 2026**

**HEAD OFFICE (LONDON):** 3rd Floor, The Hallmark Building, 52-56 Leadenhall Street, London, EC3M 5JE **T** | 020 7680 4088

**SUFFOLK:** Suffolk Enterprise Centre, 44 Felaw Street, Ipswich, IP2 8SJ **T** | 01473 407 321

**ESSEX:** 1 - 2 Crescent Court, Billericay, Essex, CM12 9AQ **T** | 01277 657 677

**NOTTINGHAM:** Office 3, Garage Studios, 41-43 St Mary's Gate, Lace Market, Nottingham, NG1 1PU **T** | 0115 697 0940

**KENT:** Maidstone Studios, Vinters Park, New Cut Road, Maidstone, Kent, ME14 5NZ **T** | 020 7680 4088

**BRISTOL:** Temple Studios, Temple Gate, Bristol, BS1 6QA **T** | 0117 456 4994

**EDINBURGH:** Lochside Way Edinburgh EH12 9DT **T** | 0131 516 8111

**MANCHESTER:** Chancery Place, 50 Brown Street, Manchester, M2 2JG **T** | 020 7680 4088

**GLASGOW:** 22 Montrose Street, Glasgow, G1 1RE **T** | 0141 648 7670

**SHEFFIELD:** Office 406, Block 2, 1 Tenter Street, Sheffield, S1 4BY **T** | 020 7680 4088

## Contents

|                                             | Page |
|---------------------------------------------|------|
| 1. Executive Summary.....                   | 1    |
| 2. Introduction .....                       | 3    |
| 3. Site Characteristics .....               | 4    |
| 4. Policy Context .....                     | 8    |
| 5. Sources of Flooding .....                | 14   |
| 6. Sequential and Exception Test.....       | 20   |
| 7. Flood Risk Mitigation Measures .....     | 22   |
| 8. Sustainable Drainage Strategy .....      | 23   |
| 9. Proposed Foul Water Drainage System..... | 30   |
| 10. Conclusion.....                         | 31   |

## Figures

|                                                                    | Page |
|--------------------------------------------------------------------|------|
| Figure 3-1: Site and surrounding area.....                         | 4    |
| Figure 3-2: Extract of Indicative masterplan.....                  | 5    |
| Figure 4-1: Extract of Warminster Neighbourhood Plan.....          | 11   |
| Figure 5-1: Flood extents for rivers and Sea without defences..... | 14   |
| Figure 5-2: Pluvial Flood Risk Map (Flood map for planning).....   | 15   |
| Figure 5-3: Pluvial Flood Risk Map (Wiltshire Council PFRA).....   | 16   |
| Figure 5-4: Groundwater Emergence Map .....                        | 17   |
| Figure 5-5: Flood extents for reservoirs.....                      | 18   |

## Tables

|                                                                                      | <b>Page</b> |
|--------------------------------------------------------------------------------------|-------------|
| Table 4-1: Avon Hampshire Management Catchment Climate Change Allowance Factors..... | 10          |
| Table 6-1: Exception Test Requirement.....                                           | 20          |
| Table 8-1: General viability of SuDS components for the development.....             | 23          |
| Table 8-2: Proposed Discharge Rate and Contributing Catchment Area.....              | 25          |
| Table 8-3: Half Drain Times for Development Infiltration Features.....               | 27          |

## Appendices

|            |                             |
|------------|-----------------------------|
| Appendix A | Topographical Survey        |
| Appendix B | Indicative Masterplan       |
| Appendix C | Wessex Water Asset Plans    |
| Appendix D | SuDS Maintenance Plan       |
| Appendix E | Drainage Strategy           |
| Appendix F | Drainage Calculations       |
| Appendix G | SuDS Treatment Calculations |
| Appendix H | Pre-planning Enquiry        |

**Document Control Sheet**

| REV | ISSUE PURPOSE          | AUTHOR | CHECKED | APPROVED | DATE     |
|-----|------------------------|--------|---------|----------|----------|
| -   | DRAFT                  | DC     | DC      | AW       | 19/12/25 |
| A   | PLANNING<br>SUBMISSION | DC     | DC      | AW       | 13/02/26 |
| B   | PLANNING<br>SUBMISSION | DC     | DC      | AW       | 10/03/26 |
| C   | PLANNING<br>SUBMISSION | DC     | DC      | AW       | 23/04/26 |

**Distribution**

This report has been prepared for the exclusive use of Bellway Homes Ltd. It should not be reproduced in whole or in part, or relied upon by third parties, without the express written authority of Ardent Consulting Engineers.



## **1. Executive Summary**

### ***Flood Risk***

- 1.1. This Flood Risk Assessment has been prepared with specific reference to the requirements of the National Planning Framework (NPPF – December 2024) and the Planning Practice Guidance (March 2014 – flood risk section updated in 17<sup>th</sup> Sept 2025). The report demonstrates that the site can be suitably developed whilst complying with the requirements of the NPPF in terms of Flood Risk.
- 1.2. This report accompanies a full planning application to be submitted to Wiltshire Council (WC). The proposals are for a full planning permission for residential development (Use Class C3) comprising 135 dwellings with associated private amenity space and car/cycle parking, a comprehensive landscaping scheme to include publicly accessible amenity space, sustainable drainage features, new tree planting and associated works. Alterations to the existing Home Farm access from Boreham Road, and new vehicular, cycle and pedestrian routes through the site. All associated infrastructure works.
- 1.3. The site is located entirely within Flood Zone 1, indicating a low risk of fluvial flooding. Most of the site is also at very low risk of surface water flooding, with limited higher-risk areas in the south, which will be managed through site design. Groundwater flood risk is moderate due to high vulnerability and shallow water tables, but mitigation measures will reduce this to low. There is no identified flood risk from reservoirs or sewers.
- 1.4. With suitable mitigation measures taken, the overall flood risk to the site is low. Due to all sources of flood risk deemed to be low or very low risk in the areas of development, it is not anticipated that a sequential test is required.

### ***Drainage Strategy***

- 1.5. The surface water runoff from the site will be discharged into the ground via infiltration. Swales and infiltration basins will be utilised to provide adequate stormwater storage up to and including the 1 in 100-year +45% climate storm event.
- 1.6. It has been shown that using Simple Index Approach, the current proposals provide adequate pollution hazard mitigation for the surface water.
- 1.7. The surface water drainage strategy is subject to approval from the LLFA.

- 1.8. It is proposed that the foul water flows from the development be conveyed by gravity sewers and discharged into the existing Wessex Water sewer located to the south the site in Boreham Road. A pre-planning enquiry has been submitted to Wessex Water and they have confirmed the existing network has capacity to provide a connection at this location. The Wessex Water response to the Pre-planning Enquiry is included in **Appendix K**. This connection is subject to a Section 106 agreement with Wessex Water.

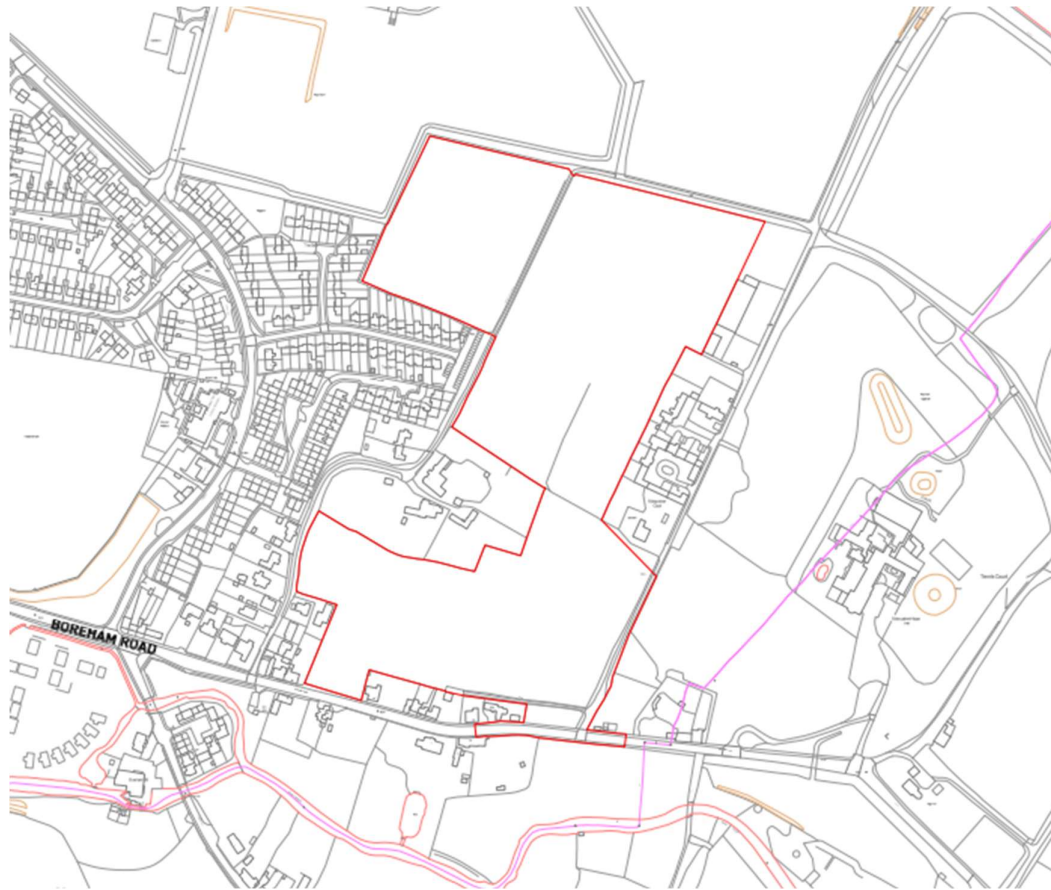
## **2. Introduction**

- 2.1. Ardent Consulting Engineers, hereafter referred to as 'Ardent', has been appointed by Bellway Homes Ltd to provide a Flood Risk Assessment (FRA) and drainage strategy in support of a full planning permission for residential development (Use Class C3) comprising 135 dwellings with associated private amenity space and car/cycle parking, a comprehensive landscaping scheme to include publicly accessible amenity space, sustainable drainage features, new tree planting and associated works. Alterations to the existing Home Farm access from Boreham Road, and new vehicular, cycle and pedestrian routes through the site. All associated infrastructure works.
- 2.2. This Flood Risk Assessment and drainage strategy has been prepared with specific reference to the requirements of the National Planning Framework (NPPF – December 2024) and the Planning Practice Guidance (March 2014 – flood risk section updated in 17<sup>th</sup> Sept 2025). The report demonstrates that the site can be suitably developed whilst complying with the requirements of the NPPF in terms of Flood Risk.

### 3. Site Characteristics

#### *Existing Site*

- 3.1. The application site is located to the east of Warminster, adjacent to the settlement boundary, on land to the north of Boreham Road at the post code BA12 9HF. The site is bound by farmland and MOD sports facilities to the north, Bishopstrow Hotel/grounds to the east, Boreham Road and existing residential properties to the south/west.
- 3.2. The site and the surrounding area are shown in **Figure 3-1**.



**Figure 3-1: Site and surrounding area**

- 3.3. Wiltshire Council act as The Local Planning Authority (LPA) the Lead Local Flood Authority (LLFA), and the Highway Authority. The site is entirely greenfield, and primarily agricultural land with some existing hedgerows, fence lines, and tree lines. The approximate centre of the site is at grid coordinates 389463m easting, 144450m northing.

- 3.4. The site is located to the east of Warminster. The small village of Bishopstrow is located south of the site.
- 3.5. The topographical survey, which was undertaken by Encompass Surveys Ltd. in January 2025, is included in **Appendix A**. The site is generally flat and gently sloping down from the northern boundary of the site. From a highpoint of between 114.0m-115.0m AOD (above ordnance datum) on the northern boundary the site gently slopes down at an approximate gradient of between 1:30-1:50, towards the low point along the southern boundary of the site circa 114.5m AOD.

### ***Development Proposals***

- 3.6. The development proposals are for a full planning permission for residential development (Use Class C3) comprising 135 dwellings with associated private amenity space and car/cycle parking, a comprehensive landscaping scheme to include publicly accessible amenity space, sustainable drainage features, new tree planting and associated works. Alterations to the existing Home Farm access from Boreham Road, and new vehicular, cycle and pedestrian routes through the site. All associated infrastructure works. Refer to **Figure 3-2** for an extract of the indicative masterplan and to **Appendix B** for the full plan.



**Figure 3-2: Extract of Indicative masterplan (Pegasus Group Ltd.)**

- 3.7. Pedestrian accesses to the development are proposed off Boreham Road to the south of the development. Further pedestrian accesses are proposed off the existing public right of way encompassing much of the western, northern, and eastern boundaries. The extents of this public right of way passing directly through the north side of the development are to be kept.
- 3.8. The total application area of the site is approximately 10.5 ha, while the developable area is circa 4.7 ha.

### **Hydrology**

- 3.9. There are no main rivers located within the site. To the South of Boreham Road, near to the site is the statutory main river, River Wylye. According to the DEFRA online datasets called MAGIC Maps, the site is not located within a groundwater source protection zone.
- 3.10. The entirety of the site is identified as being within an area of High Groundwater vulnerability and an area with soluble rock risk based on the MAGIC Maps.
- 3.11. A Site Investigation was undertaken by Wilson Associate – report reference: 5596. An infiltration rate of  $2.30 \times 10^{-5}$  m/s has been recorded in the southern part of the Site.
- 3.12. Groundwater monitoring is ongoing at the time of writing. The testing has been undertaken in line with Wiltshire Council's *Groundwater Monitoring* guidance. The testing is to be undertaken over 6 months, between the months of November and April.

### **Geology**

- 3.13. According to the British Geological Society (BGS) online Geology Viewer, the site is underlain by 3 different bands of bedrock geology across the development area. The north of the site adjacent to the northern boundary is underlain by Chalk bedrock geology called "West Melbury Marly Chalk Formation" and described as "*sedimentary bedrock formed between 100.5 and 93.9 million years ago during the Cretaceous period*". South of this, in the centre of the site, is a band of Sandstone bedrock geology called "*Melbury Sandstone Member*" and described as "*sedimentary bedrock formed between 100.5 and 93.9 million years ago during the Cretaceous period*". And the rest of the southern of the site is underlain by more Sandstone bedrock

geology called "*Boyne Hollow Chert Member*" and described as "*sedimentary bedrock formed between 113 and 100.5 million years ago during the Cretaceous period*".

3.14. Referring to DEFRA's MAGIC Maps, the soilscape of the site is identified as a "*freely draining lime-rich loamy soils*".

3.15. Referring to BGS online borehole viewer datasets, there is data for a few boreholes within the vicinity of the site.

3.16. The Site Investigation undertaken by Wilson Associates, shows the site geology consists of Clay up to 1.4m in depth, underlain by Sand and Chalk.

### ***Existing Sewer Infrastructure***

3.17. Wessex Water sewer asset records have been obtained for the whole of the site and are included in **Appendix C**.

3.18. South of the site, outside the application boundary, there is an existing public foul water sewer that runs westward along Boreham Road. Also, South-West of the site, outside of the application boundary, there is an existing public foul water that runs through the existing properties, adjacent to Grange Lane.

3.19. There are no existing public foul sewers located within the application boundary.

3.20. There are existing private foul water septic tanks, along the eastern boundary within the application boundary, that serve the existing properties to the east of the site.

## 4. Policy Context

### ***National Planning Policy Framework (December 2024)***

- 4.1. The National Planning Policy Framework (NPPF) was most recently updated in February 2025. Flood risk management policy is set out in paragraphs of 161 to 186 of the current framework. The accompanying *Planning Practice Guidance (PPG)*, last updated in August 2022, continues to provide detailed guidance on flood risk and coastal change. In the sections that follow, this report addresses the requirements and principles set out in the NPPF and PPG, as well as the updated *National Standards for Sustainable Drainage Systems (2025)* and relevant provisions of the Flood and Water Management Act, to ensure a compliant and robust approach to drainage and flood risk management.
- 4.2. It states all plans should apply a sequential, risk-based approach to the location of development – taking into account all sources of flood risk and the current and future impacts of climate change – to avoid where possible, flood risk to people and property. Proposals should do this and manage residual risk, by:
- a) applying the sequential test, and if necessary, the exception test;
  - b) safeguarding land from development that is required for current and future flood management;
  - c) using opportunities provided by new development and improvements in green and other infrastructure to reduce the causes and impacts of flooding (making as much use as possible of natural flood management techniques as part of an integrated approach to flood risk management); and
  - d) where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long-term, seeking opportunities to relocate development including housing, to more sustainable locations.
- 4.3. The NPPF states at footnote 63 that that “*A site-specific flood risk assessment should be provided for all development in Flood Zones 2 and 3. In Flood Zone 1, an assessment should accompany all proposals involving: sites of 1 hectare or more; land which has been identified by the Environment Agency as having critical drainage problems; land identified in a strategic flood risk assessment as being*



*at increased flood risk in future; or land that may be subject to other sources of flooding, where its development would introduce a more vulnerable use."*

- 4.4. The Planning Practice Guidance (PPG) last updated in September 2025 provides the methodology required to undertake the Sequential and Exception Tests. The sequential test should be used in areas that are known to be at risk now or in the future of any form of flooding. As detailed in this report, due to all sources of flood risk being deemed as low or very low risk in the areas of development, it is not anticipated that a sequential test is required.

***Flood and Water Management Act (2010)***

- 4.5. The Flood and Water Management Act places a duty on all flood risk management authorities to co-operate with each other. The Act also provides lead local flood authorities (LLFA) and the Environment Agency (EA) with a power to request information required in connection with their flood risk management functions.
- 4.6. The LLFAs are responsible for developing, maintaining, and applying a strategy for local flood risk management in their areas, and for maintaining a register of flood risk assets. They also have lead responsibility for managing the risk of flooding from surface water, groundwater, and ordinary watercourses. As part of this, LLFAs are responsible for maintaining a register of assets that are significant impact on flooding within their area.

***Sustainable Drainage Systems - Non-statutory technical standards for sustainable drainage systems (March 2015)***

- 4.7. The Non-statutory technical standards for sustainable drainage systems were published in March 2015. This document sets out non-statutory technical standards for sustainable drainage systems. They should be used in conjunction with the Planning Practice Guidance. In addition, the Best Practice Guidance for the Planning Practice Guidance was published in July 2015.
- 4.8. The Local Planning Authority (LPA) may set local requirements for planning permission that have the effect of more stringent requirements than these non-statutory technical standards.
- 4.9. In addition, SuDS should be designed in accordance with CIRIA C753 SuDS Manual, which represents current best practice.

4.10. The design team are aware of the updated guidance 'Sustainable Drainage Systems – Technical Standards for Sustainable Drainage Systems (June 2025)', which supersedes this document. However, following initial discussions with the LLFA, the March 2015 standards have been agreed and used at this stage.

***Planning Practice Guidance (PPG) on Climate Change***

4.11. The PPG states that to allow for the predicated impacts of climate change on Peak Rainfall Allowance, consideration should be given to the catchment within which the site is located. The site is located in the Avon Hampshire Management Catchment.

4.12. The PPG states that to allow for the predicted impact of climate change on surface water runoff within the catchment, the following increases detailed in **Table 4-1** below, should be applied to the site rainfall intensities. For developments with a lifetime up to or beyond 2100, the upper end allowances should be used.

**Table 4-1: Avon Hampshire Management Catchment Climate Change Allowance Factors**

| Avon Hampshire Management Catchment          | Higher Central | Upper End |
|----------------------------------------------|----------------|-----------|
| <b>3.3% annual exceedance rainfall event</b> |                |           |
| <b>Total potential change 2050s</b>          | 20%            | 35%       |
| <b>Total potential change 2070s</b>          | 25%            | 40%       |
| <b>1% annual exceedance rainfall event</b>   |                |           |
| <b>Total potential change 2050s</b>          | 25%            | 40%       |
| <b>Total potential change 2070s</b>          | 25%            | 45%       |

4.13. Therefore, applying an allowance of 40% and 45% for the effects of climate change on the 3.3% and 1% annual exceedance rainfall events would achieve the policy requirements when designing the proposed stormwater drainage system.

***Local Development Plan – Site Assessments (June 2025)***  
***Wiltshire Core Strategy***

4.14. The site is located within Wiltshire Council and therefore approval for development is informed by Wiltshire Council's Core Strategy. This document sets out the core strategic policies for developments across the county and identifies housing needs. To support the delivery of the new housing requirements set out in the Core Strategy, the Wiltshire Housing Site Allocations Plan (adopted in

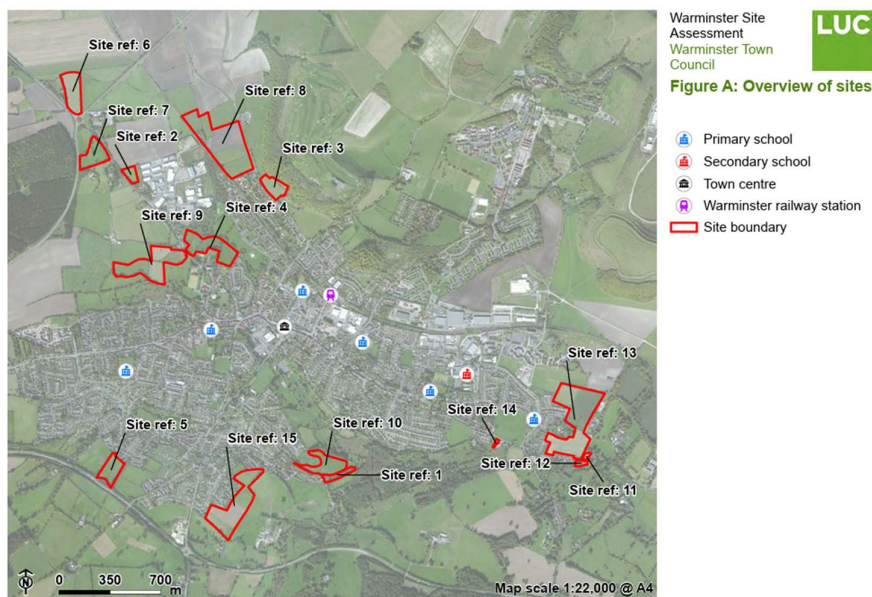
February 2020) was developed. This document allocated new sites across the whole county of Wiltshire for housing throughout the plan period.

4.15. The development site is not identified within the Core Strategy or the Wiltshire Housing Site Allocations Plan. However, Warminster Town Council have completed a review of potential housing sites in conformity with the strategic policies set out in the Core Strategy. This review is compiled in the Warminster Neighbourhood Plan.

### **Wiltshire Neighbourhood Plan**

4.16. Land Use Consultants Limited were appointed by Warminster Town Council to “carry out an assessment of sites with the purpose of identifying a shortlist with potential for allocation in the Warminster Neighbourhood Plan Review.” This document reviewed an array of sites around Warminster, against a criteria including employment, housing requirements, and heritage to verify if the development would have an overall positive/negative impact.

4.17. This document assessed the proposed development at Boreham Road, called ‘Ref. 13: Land East of the Dene (Home Farm)’ in the report, and found the site to have neutral impact and present no issue. An extract from this document showing an overview of the sites that were reviewed is shown in **Figure 4-1**.



**Figure 4-1: Extract of Warminster Neighbourhood Plan - Housing Site Assessment (Warminster Town Council)**

***Preliminary Flood Risk Assessment for Wiltshire Council (PFRA) – May 2011***

4.18. In line with the requirements set out in The Flood Risk Regulations (2009), Wiltshire Council in conjunction with the Environment Agency (EA) and the town and parish councils, produced a Preliminary Flood Risk Assessment (PFRA) to provide a high level assessment of flood risk from local sources within the county. As part of this, the council reviewed historic flood records and identified future flood risk to highlight areas at "*serious risk of flooding*".

4.19. In the PFRA produced in 2011, the EA identified no flood risk areas in Wiltshire. This was corroborated by the review completed by Wiltshire Council which also identified no flood risk areas.

4.20. A December 2017 addendum was produced in line with The Flood Risk Regulations (2009) which mandates reviews be carried out in "*intervals of no more than 6 years*". This document found no flood events of sufficient magnitude to qualify as significant within the period. It also identified no areas flood risk areas.

***Wiltshire Council Level 1 Strategic Flood Risk Assessment (SFRA) – November 2024***

4.21. The NPPF sets out that strategic policies on development (including local plans), should be informed by an SFRA. It also states that the SFRA forms the basis for the application of the sequential test for sites within councils. Wiltshire Council then commissioned JBA Consulting to undertake a Level 1 SFRA which reviewed the flood risk from all sources including fluvial, pluvial, groundwater, sewers, and artificial sources within the county.

4.22. The mapping data in the produced from the SFRA is available online on an ArcGIS viewer. The findings from the online mapping is detailed in **Section 5** of this report.

## 5. Sources of Flooding

5.1. The NPPF requires flood risk from the following sources to be assessed, each of which are assessed separately below:

- Fluvial sources (river flooding);
- Tidal sources (flooding from the sea);
- Pluvial sources (flooding resulting from overland flows);
- Groundwater sources;
- Sewer Flooding;
- Historic Flooding; and
- Artificial sources, canals, reservoirs etc.

### ***Flood Zone Designation***

5.2. Flood Zones refer to the probability of river and sea flooding, ignoring the presence of defences. The NPPF Planning Practice Guidance defines Flood Zones as follows:

**Flood Zone 1:** Low Probability. Land having a less than 0.1% annual probability of river or sea flooding.

**Flood Zone 2:** Medium Probability. Land having between a 1% and 0.1% annual probability of river flooding; or land having between a 0.5% and 0.1% annual probability of sea flooding.

**Flood Zone 3a:** High Probability. Land having a 1% or greater annual probability of river flooding; or Land having a 0.5% or greater annual probability of sea.

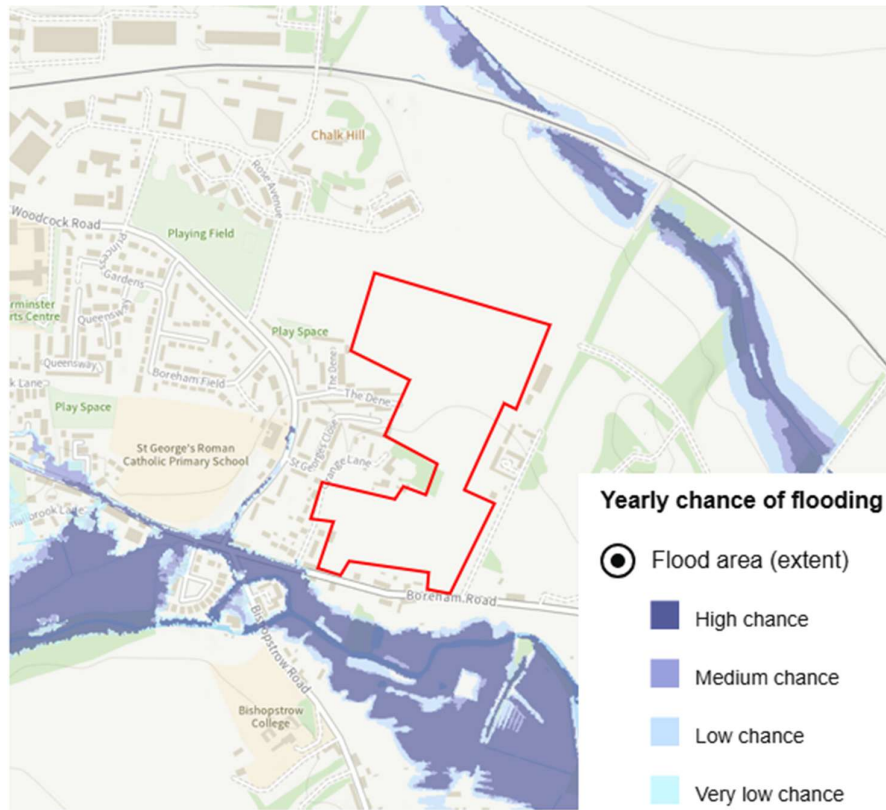
**Flood Zone 3b:** The Functional Floodplain. This zone comprises land where water from rivers or the sea has to flow or be stored in times of flood. The identification of functional floodplain should take account of local circumstances and not be defined solely on rigid probability parameters. Functional floodplain will normally comprise:

- having a 3.3% or greater annual probability of flooding, with any existing flood risk management infrastructure operating effectively; or
- land that is designed to flood (such as a flood attenuation scheme), even if it would only flood in more extreme events (such as 0.1% annual probability of flooding).

5.3. Based off the online Flood Map for Planning, the entire site is located within **Flood Zone 1**.

### **Fluvial Flooding**

- 5.4. As stated in 5.3, the entire site is located within Flood Zone 1 and is therefore deemed to be at a low risk of fluvial flooding.
- 5.5. In addition to the Flood Zone mapping, flooding extents for rivers and sea both with and without defences are shown in the online Flood map for Planning datasets. This shows that no area within the site is at risk of flooding from rivers and sea. An extract of this data is shown in **Figure 5-1**. However there are areas with medium and high fluvial flood risk south-west of the site, associated with the River Wylye.



**Figure 5-1: Flood extents for rivers and Sea without defences  
(Flood map for planning – Gov UK)**

- 5.6. These areas are outside the site area and are below the sites levels. Therefore these areas of risk do not present a risk to the site.
- 5.7. The site is considered to be at low risk of fluvial flooding.



### **Pluvial Flooding**

5.8. The current Environment Agency data for the long term flood risk for properties outlines the surface water flood risk for areas in the UK. An extract showing the pluvial flood risk for the site is shown in **Figure 5-2** below.

5.9. **Figure 5-2** shows that majority of the site is at a very low risk of flooding i.e. less than 1 in 1000 chance of flooding from surface water. There are two areas in the south of the site that are at risk of pluvial flooding from the 1 in 1000 up to the 1 in 30 chance of annual probability. This means that these areas have a high chance of pluvial flooding.

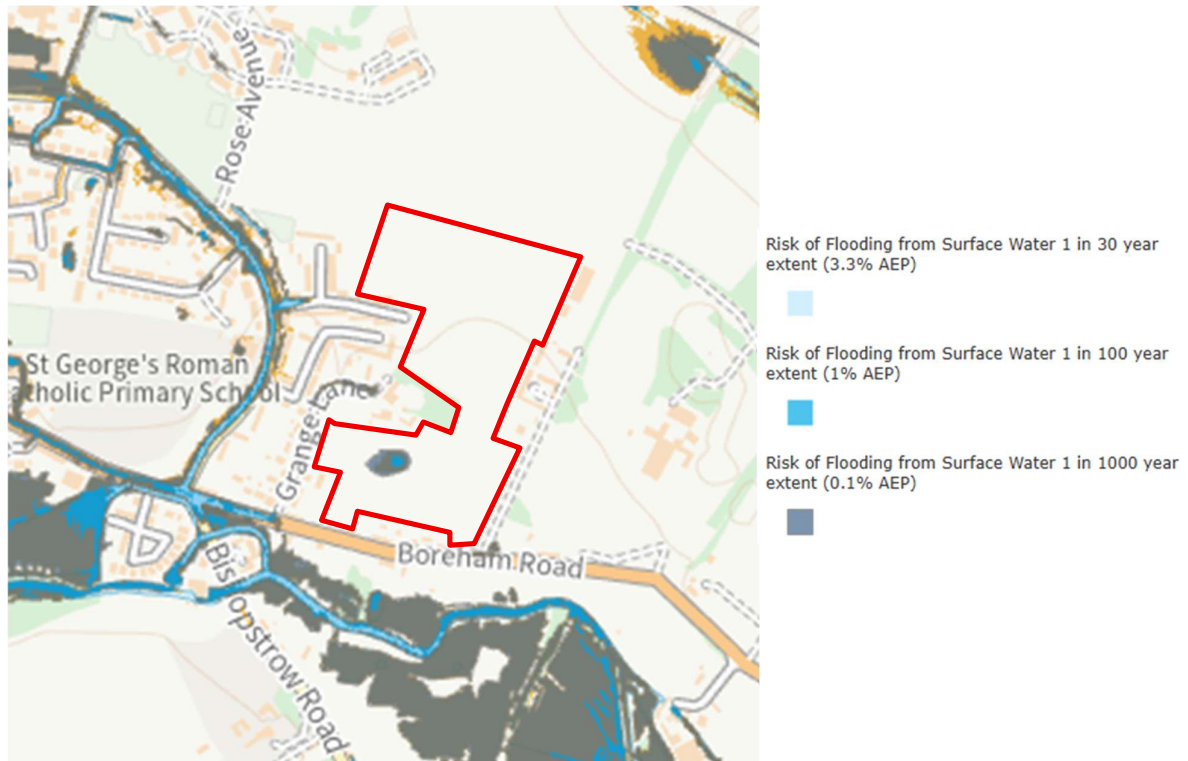


**Figure 5-2: Pluvial Flood Risk Map (Flood map for planning – Gov UK)**

(a) 1 in 30 annual likelihood of flooding; (b) 1 in 100 annual likelihood of flooding;  
(c) 1 in 1000 annual likelihood of flooding

5.10. The SFRA mapping described in **Section 4** of this report indicates an area of pluvial flood risk in the south of the site. An extract of this mapping is shown in **Figure 5-3**, and shows an area of 0.1% and 1% annual exceedance probability in the south of the site.





**Figure 5-3: Pluvial Flood Risk Map (Wiltshire Council SFRA)**

5.11. While there are areas of high pluvial flood risk within the site, the levels of the site and the masterplan will be designed to convey exceedance flows toward existing/proposed landscaping areas and away from proposed properties. Importantly, there are no habited areas or properties in this area of the site, and therefore with suitable design provisions, the site is deemed to be at low risk of pluvial flooding.

### **Groundwater Flooding**

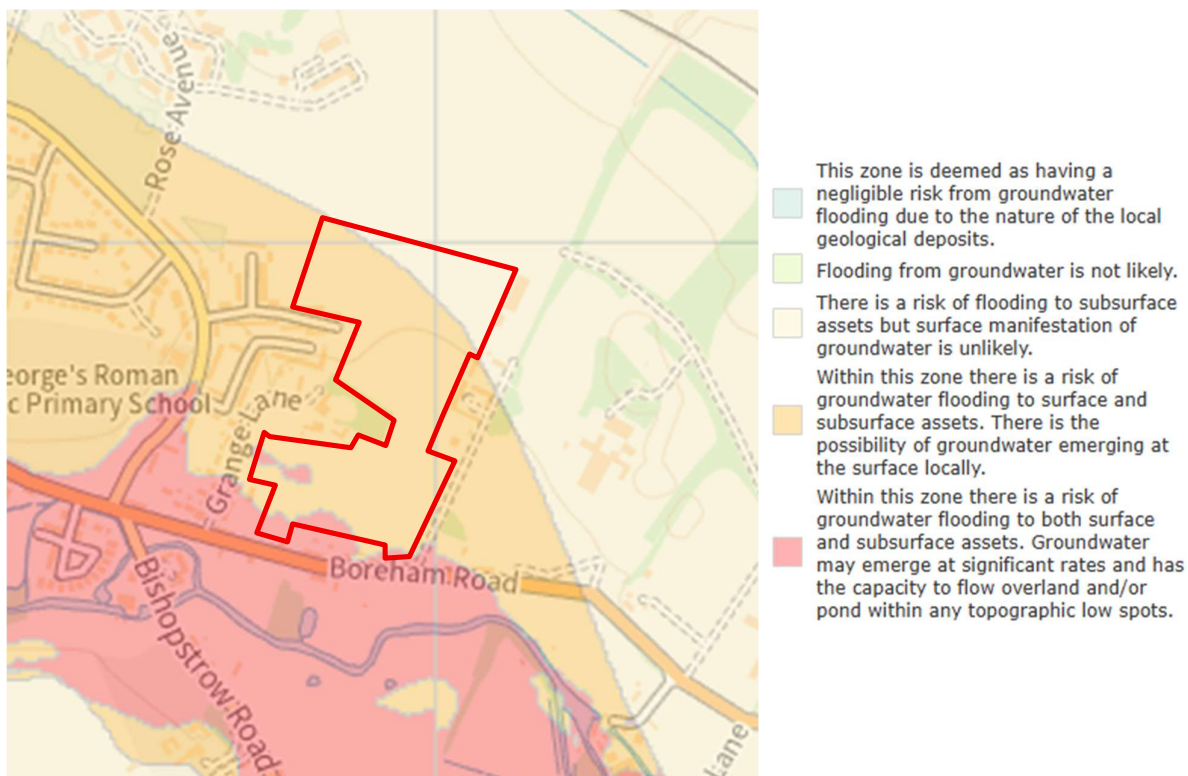
5.12. Groundwater flooding occurs when water rises from underlying aquifers or springs, typically following extended periods of heavy rainfall. It is most likely in low-lying areas with shallow water tables, particularly those underlain by major aquifers or floodplain soils.

5.13. On the BGS online borehole database, there are two boreholes located in close proximity of the site. Groundwater was encountered in both of the boreholes at depths of 1.20m and 2.00m below the ground.

5.14. According to the Environment Agency's data for long-term flood risk, flood from groundwater is possible in this area when groundwater levels are high.

5.15. As stated in 3.10, the online mapping from MAGIC Maps indicate the entirety of the site is located in an area of high groundwater vulnerability with soluble rock risk.

5.16. The SFRA mapping described in **Section 4** of this report indicates the site is in an area of groundwater emergence. An extract of this mapping is shown in **Figure 5-4**. This shows that the majority of the site is at risk of surface and subsurface groundwater flooding and has a possibility of local groundwater emergence at the surface. There is a small area in the north of the site where there is risk to subsurface assets, however surface emergence is unlikely. Then at south-west of the site, there are two areas where there is risk of surface and subsurface groundwater flooding and that groundwater may emerge at significant rates.

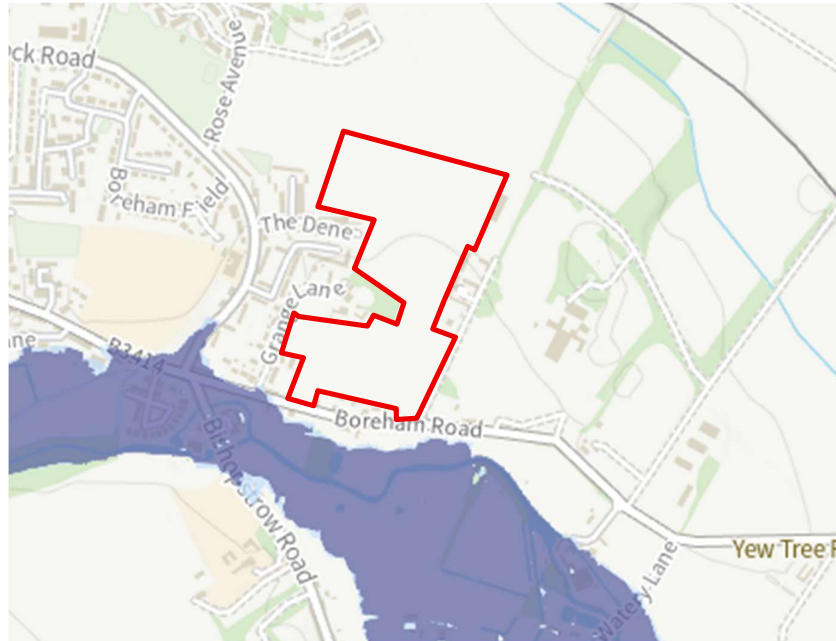


**Figure 5-4: Groundwater Emergence Map (Wiltshire Council SFRA)**

5.17. To mitigate any groundwater flood risk, suitable finished floor levels and sustainable drainage system will be incorporated into the proposals. Therefore, after suitable measures are taken, the risk of groundwater flooding for the development is deemed to be low.

### **Artificial Sources**

5.18. According to the Environment Agency's mapping for long-term flood risk, there is no risk of flooding from reservoirs in this area. **Figure 5-5** shows an extract of the current datasets for flood risk from artificial sources in the 'Flood Map for Planning' from the Environment Agency.



**Figure 5-5: Flood extents for Reservoirs  
(Flood map for planning – Gov UK)**

5.19. Therefore, the site is considered to be at a very low risk of flooding from artificial sources.

### **Sewer Flooding**

5.20. Sewer flooding is caused by the capacity of the existing public sewers within an area being exceeded and overtopping onto the surface.

5.21. The SFRA mapping described in **Section 4** of this report shows that there are no incidents of sewer flooding within the site area.

5.22. Wessex Water asset maps indicate there are no sewers within the site extents. Sewer flood risk is therefore considered to be low for this site.

## 6. Sequential and Exception Test

### *Sequential Test*

- 6.1. The objective of the Sequential Test is to steer new developments toward the areas with the lowest probability of flooding from any source. Where there are no reasonably available sites in lower flood risk areas, local planning authorities in their decision making should take into account the flood risk vulnerability of land uses and consider reasonably available sites in higher flood risk areas.
- 6.2. As stated in 5.3, the site is located wholly within Flood Zone 1. Further to this, the risk of flooding from sewers and artificial sources has been deemed to be low. The site is noted to have some pluvial and groundwater flood risk, however with the incorporation of suitable flood risk mitigation measures (set out in Chapter 7), the overall flood risk for both is considered to be low. Due to all sources of flood risk deemed to be low or very low risk in the areas of development, it is not anticipated that a sequential test is required. However, confirmation of sequential testing will be required with Wiltshire Council.
- 6.3. Wiltshire Council's SFRA shows there is an isolated area, within the application site, highlighting that the site would be considered for sequential testing; refer to Page 17 of Appendix R within the SFRA. However, as the development is outside of the highlighted area, and in line with the latest guidance within the PPG, it is not anticipated that a sequential testing is required.
- 6.4. A Sequential Test was undertaken by DPP Planning, report ref. 6876CA (dated. April 2026).
- 6.5. The Sequential Test concludes that the site represents the most sequentially preferable location for the proposed development within the defined search area. The Sequential Test is therefore considered to be passed.

### *Exception Test*

- 6.6. The requirement for an Exception Test is dictated by the proposed development and the associated Flood Risk Vulnerability Classification, which is set out in Annex 3 of the NPPF. Based off the classifications set out in the NPPF this development comprising residential dwellings would be classified as '**more vulnerable**'.

6.7. **Table 6-1**, taken from the PPG on Flood Risk and Coastal Change shows the Exception Test requirements for different Flood Risk Vulnerability Classifications in different Flood Zones.

**Table 6-1: Exception Test Requirement (PPG – Flood Risk and Coastal Change)**

| Flood Risk Vulnerability Classification |               | Essential Infrastructure | Water compatible        | Highly Vulnerable       | More Vulnerable | Less Vulnerable |
|-----------------------------------------|---------------|--------------------------|-------------------------|-------------------------|-----------------|-----------------|
| Flood Zone                              | Flood Zone 1  | ✓                        | ✓                       | ✓                       | ✓               | ✓               |
|                                         | Flood Zone 2  | ✓                        | Exception Test Required | ✓                       | ✓               | ✓               |
|                                         | Flood Zone 3a | Exception Test Required  | X                       | Exception Test Required | ✓               | ✓               |
|                                         | Flood Zone 3b | Exception Test Required  | X                       | X                       | X               | ✓               |

6.8. Given that, as stated in 5.3, the development is located wholly in Flood Zone 1, and it is classed as 'more vulnerable' development, the Exception Test is not required

## **7. Flood Risk Mitigation Measures**

- 7.1. The site-specific flood risk assessment aims to demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere. The development should achieve this while, where possible, reducing flood risk overall.
- 7.2. To achieve the above, the development incorporates the following measures to reduce flood risk and ensure adequate protection in the event of flooding.

### ***Sustainable Drainage Proposals***

- 7.3. The surface water network will be designed to accommodate up to and including the 100 year plus 45% climate change storm events. Runoff from the site will discharge into the ground via infiltration.
- 7.4. Sustainable Drainage Systems (SuDS) in the form of swales and infiltration basins will be incorporated into the surface water network to provide at surface storage and reduce possible flooding.

### ***Proposed Layout and Levels***

- 7.5. The proposed detailed masterplan and levels proposals will be designed to ensure that the flood routing plan simulates the pre-development site as much as possible.
- 7.6. Levels will be designed such that surface water runoff will be directed away from buildings and toward the low points of the site, and non-habited areas.

### ***Finished Floor Levels***

- 7.7. There are no units in immediate proximity of the surface water flooding within the site. However, all proposed residential units will look to be at least 300mm above the surface water flood risk on site to mitigate against the risk of surface water flooding at the site.

### ***Groundwater Mitigation Measures***

- 7.8. The proposed residential units will look to be raised above the groundwater level to mitigate against the risk of groundwater flooding at the site.
- 7.9. Any base of infiltrating SuDS features to be designed a minimum of 1m above the groundwater level, based upon the recorded groundwater level.

## 8. Sustainable Drainage Strategy

8.1. The pre-development site is entirely greenfield and is therefore treated as 100% permeable. As stated in paragraph 3.8, the total application area of the site is approximately 10.5 ha.

### ***Drainage Hierarchy Consideration***

8.2. In accordance with the Detailed Technical Check List for produced by Wiltshire Council (available online), when proposing solutions to dispose of surface water runoff, the below hierarchy of drainage options should be followed:

- Is collected for use (rainwater harvesting);
- Is discharged into the ground (via infiltration);
- Is discharged to a watercourse or other surface water body;
- Is discharged to a surface water sewer;
- Is discharged to another drainage system (e.g. highway drain);
- To a combined sewer

8.3. Initially, rainwater harvesting was considered to dispose of surface water runoff. However, these systems generally provide limited attenuation capacity, because the volumes depend on usage patterns. Often, the system capacity is reduced when the tanks are already full. As such, rainwater harvesting would not be suitable as the primary mode of surface water disposal for this development, and would be better considered as a supplementary treatment method.

8.4. In line with the drainage hierarchy, infiltration is next considered to dispose of surface water runoff on the development. As per the site investigation, infiltration is a viable mode of discharge. An infiltration rate of  $2.30 \times 10^{-5}$  m/s (0.0828 m/hr) has been recorded in the southern part of the Site.

8.5. Following the principles of the drainage hierarchy, consideration was given to the potential for discharging surface water runoff to a local watercourse or waterbody. Approximately 200m south-west of the site, the River Wylye was considered as a viable point of discharge. However, as infiltration is viable, it is proposed for the strategy to discharge via infiltration.



### **Consideration of Sustainable Drainage Systems (SuDS)**

8.6. DEFRA's Non-statutory technical guidance for Sustainable Drainage Systems and CIRIA Guidance C753 "The SuDS manual" have been used to develop the appropriate SuDS strategy. The constraints and opportunities for the use of various SuDS components are summarised in **Table 8-1**.

**Table 8-1: General viability of SuDS components for the development**

| <b>SuDS Component</b> | <b>Infiltration Devices</b>                                                                                                                                                                                                                      |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Constraints           | As per the site investigation, the site is shown to be viable to discharge via infiltration.                                                                                                                                                     |
| Opportunities         | There is potential for infiltration via attenuation basins and swales.                                                                                                                                                                           |
| <b>SuDS Component</b> | <b>Lined Permeable Paving (Source Control)</b>                                                                                                                                                                                                   |
| Constraints           | The treatment and conveyance benefits of permeable paving is dependent on regular maintenance.<br>Permeable paving can't be proposed on any public roads due to adoption issues, therefore limiting the extents where it can be proposed.        |
| Opportunities         | Permeable paving can be used to provide a stage of treatment in private drives around the site, should this be required as part of the treatment train.                                                                                          |
| <b>SuDS Component</b> | <b>Rainwater Harvesting (Source Control)</b>                                                                                                                                                                                                     |
| Constraints           | The benefits of rainwater harvesting on a specific design storm event cannot be quantified, due to the seasonal availability of storage within the structure.                                                                                    |
| Opportunities         | Opportunities in amenity areas to provide harvesting features such as water butts exist. However, it is difficult to quantify contribution, and therefore not included within calculations as part of this surface water management strategy.    |
| <b>SuDS Component</b> | <b>Swales (Permeable Conveyance)</b>                                                                                                                                                                                                             |
| Constraints:          | In order to provide practicable attenuation benefits 1:3 side-slope swales tend to require a significant land requirement.                                                                                                                       |
| Opportunities:        | Where possible swales can be incorporated along roads and in open spaces. There is opportunity, in the open space to the south, to utilise swales for treatment.                                                                                 |
| <b>SuDS Component</b> | <b>Tree pits / Rain gardens (Filtration)</b>                                                                                                                                                                                                     |
| Constraints:          | Tree pits and rain gardens have more rigorous upkeep and maintenance and are therefore often poorly maintained. This leads to clogging over time. They are subject to coordination and can be difficult to get adopted within the sewer network. |
| Opportunities:        | Within verges and/or public landscaped areas, subject to highway approval                                                                                                                                                                        |



| SuDS Component | Green Roofs (Source Control)                                                                                                                                                                                                                                                                                                                                       |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Constraints:   | Subject to Architect's design and house-types, all houses are likely to have pitched roofs. Increased structural load not feasible for individual houses.                                                                                                                                                                                                          |
| Opportunities: | None.                                                                                                                                                                                                                                                                                                                                                              |
| SuDS Component | Attenuation Ponds/Basins (Retention/Detention)                                                                                                                                                                                                                                                                                                                     |
| Constraints:   | In order to provide practicable attenuation benefits, 1:3 side slopes ponds/basins tend to require significant land requirement. There are also existing treelines/hedgelines that are likely to be retained for the development. Any ponds/basins and associated reprofiling of levels will need to be located outside the root protection areas for these trees. |
| Opportunities: | There is space within the development to allow basins to be used to provide stormwater storage, treatment and to discharge the runoff via infiltration.                                                                                                                                                                                                            |
| SuDS Component | Attenuation Tanks (Retention/Detention)                                                                                                                                                                                                                                                                                                                            |
| Constraints:   | None.                                                                                                                                                                                                                                                                                                                                                              |
| Opportunities: | Where possible tanks can used where readily accessible such as parking spaces and open spaces.                                                                                                                                                                                                                                                                     |

8.7. Going through each of the different SuDS components in **Table 8-1**, it has been deemed that infiltration basins and infiltration swales are the most viable option to provide both surface water storage and treatment within the surface water drainage system prior discharging into the ground via infiltration.

8.8. A proposed SuDS Maintenance Plan has been produced as part of the drainage strategy. A copy of this can be found in **Appendix D**.

### ***Proposed Surface Water Drainage System***

8.9. Based on the site layout, 3.028ha of the site is impermeable, including an allowance of 10% to private curtilages for urban creep. This equates to 65% if the development area of 4.588 ha.

8.10. Is it proposed to discharge the surface water into the ground via infiltration, up to and including the 1 in 100 year plus 45% climate change storm event.

8.11. The surface water drainage strategy as shown in **Appendix E** consists of a sewer system that will collect runoff from the hardstanding areas and convey it towards one of four swales that drain into the infiltration basin located in the south of the site. This basin and swales-combined will provide attenuation for all events up to and including the 1 in 100 year plus 45% climate change storm event, including an additional allowance within the freeboard of the basin for any exceedance

events. Modelling has been completed in Causeway Flow to demonstrate the capacity of the basins to attenuate flows up to this storm event.

8.12. Due to the topography of the site, a second infiltration basin has been provided to serve the access road.

8.13. Infiltration tests were taken for where the attenuation basin is proposed; refer Wilson Associate's Site Investigation; report reference - 5596. Therefore, it is proposed to discharge the surface water at an infiltrate rate of  $2.30 \times 10^{-5}$  m/s (0.0828 m/hr).

8.14. The proposed surface drainage strategy has been calculated using two catchments. The catchment and proposed infiltration rate is shown in **Table 8-2** below.

**Table 8-2: Proposed Discharge Rate and Contributing Catchment Area**

| Catchment | Basin   | Developable Area (ha) | Impermeable Area (ha) | Proposed Infiltration rate (m/s) | Proposed Infiltration rate (m/hr) |
|-----------|---------|-----------------------|-----------------------|----------------------------------|-----------------------------------|
| A         | Basin A | 4.56                  | 3.000                 | $2.30 \times 10^{-5}$            | 0.0828                            |
| B         | Basin B | 0.028                 | 0.028                 | $2.30 \times 10^{-5}$            | 0.0828                            |

8.15. As stated in paragraph 4.13, applying an allowance of 40% and 45% for the effects of climate change on the 3.3% and 1% annual exceedance rainfall events (1 in 30 year and 1 in 100 year respectively) would achieve the policy requirements when designing the proposed stormwater drainage system.

8.16. Causeway Flow has been used to model the infiltration swales and infiltration basin in the surface water drainage design. The results show that the attenuation features provide sufficient storage for all storm events up to and including the 1 in 100 year +45% climate change storm event. The results are included in **Appendix F**.

### ***Surface Water Runoff Quality***

8.17. Without implementing appropriate SuDS features with adequate treatment provision, the surface water runoff from the proposed impermeable surfacing would increase the risk of surface water contamination. The CIRIA C753 SuDS Manual, sets out the process for determining pollution risk from the land use and the treatment potential for a development with the 'Simple Index Approach'. Specifically, Table 26.2, 26.3, and 26.4 in the SuDS Manual which have been duplicated in **Appendix G**.

8.18. Table 26.2 from the SuDS Manual identifying the indicative pollution hazard indices for the relevant land uses. Based on the proposed layout, the Pollution Hazard Level would be considered 'Very Low' to 'Low' for the majority of the development site, with the exception of the proposed main access road, as it is currently anticipated this will accommodate more than 300 traffic movements per day. Therefore, the Pollution Hazard Level for the main access road is considered 'Medium', with the remainder of the site as 'Low'.

8.19. To provide adequate treatment to the surface water runoff the total mitigation indices for the SuDS strategy need to exceed the pollution hazard level. The relevant calculation is provided in **Appendix G**. The calculation demonstrates that the combination of highway swales and the proposed detention basin provide sufficient treatment of metals, hydrocarbons, and total suspended solids for the whole development including the main access road.

### ***Long Term Storage Requirements***

8.20. In addition to providing adequate Attenuation Storage to limit the runoff rate for the extreme rainfall events back to the existing rate, the additional *volume* of runoff has to be accounted for. Long Term Storage, is therefore the additional storage to address the additional volume as a result of the development.

8.21. As summarised in **Table 8-3**, it is proposed to discharge the surface water into the ground via infiltration. In line with section 24.10 out in the CIRIA C753 SuDS Manual, this satisfies the Long-Term Storage requirement, and there is no need for further storage.

**Half Drain Time**

- 8.22. The Half Drain Time, refers to the amount of time for a stormwater storage feature within a drainage design to discharge 50% of the stored runoff volume after a design rainfall event. This is to ensure that a stormwater drainage design has sufficient resilience to receive runoff from subsequent storms.
- 8.23. As set out in DEFRA’s Non-statutory technical guidance for Sustainable Drainage Systems, the maximum Half Drain Time for any storage structure within a drainage system should be 24 hours. Wiltshire Council’s guidance document ‘Drainage and Betterment Strategy’ (available online, dated June 2024) sets out the requirement for storage features to half drain within 24 hours for all storms up to and including the 1 in 30-year storm plus climate change. Where this is not possible, the storage must be designed to accommodate the full volume of a 1 in 30-year storm event plus climate change, followed by an additional 1 in 10-year event, without compromising performance or increasing flood risk.

**Table 8-3: Half Drain Times for Development Attenuation Features**

| Storage Element | Half Drain Time for 1-30 year +CC event (Hours) | Does this meet the 24 hour half drain time? |
|-----------------|-------------------------------------------------|---------------------------------------------|
| Basin A         | 1200                                            | Yes                                         |
| Basin B         | 0                                               | Yes                                         |

- 8.24. As shown in **Table 8-3**, the basins meet the half drain times.

**Exceedance Routes**

- 8.25. As a result of heavy or extreme storm events, it is sometimes unavoidable that the capacity of the sewers and other drainage systems will be exceeded. This could occur in any of the following events:
- when the runoff exceeds the inlet capacity of the drainage system;
  - when the receiving water or pipe system becomes overloaded/blocked or;
  - when the outfall is restricted due to flood levels in the receiving water
- 8.26. To limit the impact of flow exceedance on people and properties, the flow exceedance routes must be assessed and suitable mitigation measures must be incorporated. As

set out in paragraphs 7.5 and 7.6, the levels and masterplan have been designed to direct exceedance flows away from buildings/habited areas and toward the low points of the site and non-habited areas. These exceedance routes ultimately mimic the current flow routes on the site.

8.27. Additionally, the proposed infiltration features have been located toward the lower lying areas of the site, to ensure that any exceedance flows can be swiftly directed toward the low points of the site. The overland flow routes for the proposals are shown on the drainage strategy included in **Appendix E**.

#### ***Future Maintenance and Adoption***

8.28. It is the intention that the main sewers will be adopted by Wessex Water under a Section 104 agreement. If the proposed roads are not adopted by the Highway Authority (Wiltshire Council), then a suitable drainage easement around the sewers will have to be considered.

8.29. It is intended that the SuDS components will be conveyed to a management company for maintenance. Currently, Wiltshire Council state on their website that in their role as Highway Authority they might adopt SuDS for road drainage. However, at this stage they will not adopt SuDS for property drainage.

8.30. All the plot drainage will remain private, while all the gullies and connections within access roads will be managed by a management company if the roads are not being offered for adoption.

8.31. A maintenance plan is also included in **Appendix D**. These have been informed by the guidance outlined within the CIRIA C753 SuDS Manual, and will be supplemented by manufacturers specifications. Any drainage/SuDS features that can be adopted will be managed by Wiltshire Council or Wessex Water, otherwise, a management company will be responsible for their maintenance.

## 9. Proposed Foul Water Drainage System

- 9.1. As stated in paragraph 3.6, the proposed development comprises up to 135 dwellings. In line with the Sewerage Sector Guidance Appendix C, clause B3.1b, the peak design rate for foul water can be determined as a rate 4000 litres per day for each dwelling. Therefore, the peak foul flow rate comes to a total of 6.3 l/s.
- 9.2. The foul water strategy will collect water flows generated from the proposed dwellings and convey them via a gravity sewer network toward the existing Wessex Water foul sewer located in Boreham Road, south of the site. A pre-planning enquiry has been submitted to Wessex Water and they have confirmed the existing network has capacity to provide a connection at this location. The Wessex Water response to the Pre-planning Enquiry is included in **Appendix H**. The direct foul water connection into the existing sewers will also be subject to a Section 106 agreement with Wessex Water.
- 9.3. The drainage strategy which shows the foul water drainage system is shown in **Appendix E**.

## **10. Conclusion**

10.1. Ardent Consulting Engineers has been appointed by Bellway Homes Ltd to provide a Flood Risk Assessment (FRA) and drainage strategy in support of an outline planning application for a residential development including up to 135 residential dwellings, landscaping and associated infrastructure. The proposals also involve the upgrading of the existing vehicular / pedestrian access to the site from Boreham Road.

10.2. The site is located entirely within Flood Zone 1, indicating a low risk of fluvial flooding. Most of the site is also at very low risk of surface water flooding, with limited higher-risk areas in the south, which will be managed through site design. Groundwater flood risk is moderate due to high vulnerability and shallow water tables, but mitigation measures will reduce this to low. There is no identified flood risk from reservoirs or sewers.

10.3. The proposed masterplan and levels proposals will be designed to ensure that the flood routing plan simulates the pre-development site as much as possible. Also, the levels of the site and the masterplan will be designed to convey exceedance flows toward existing/proposed landscaping areas and away from proposed properties. Therefore the pluvial flood risk is considered to be low.

10.4. Due to all sources of flood risk deemed to be low or very low risk in the areas of development, it is not anticipated that a sequential test is required.

10.5. The flood risk mitigation measures are recommended so as to not proliferate any flood risk following completion of the development:

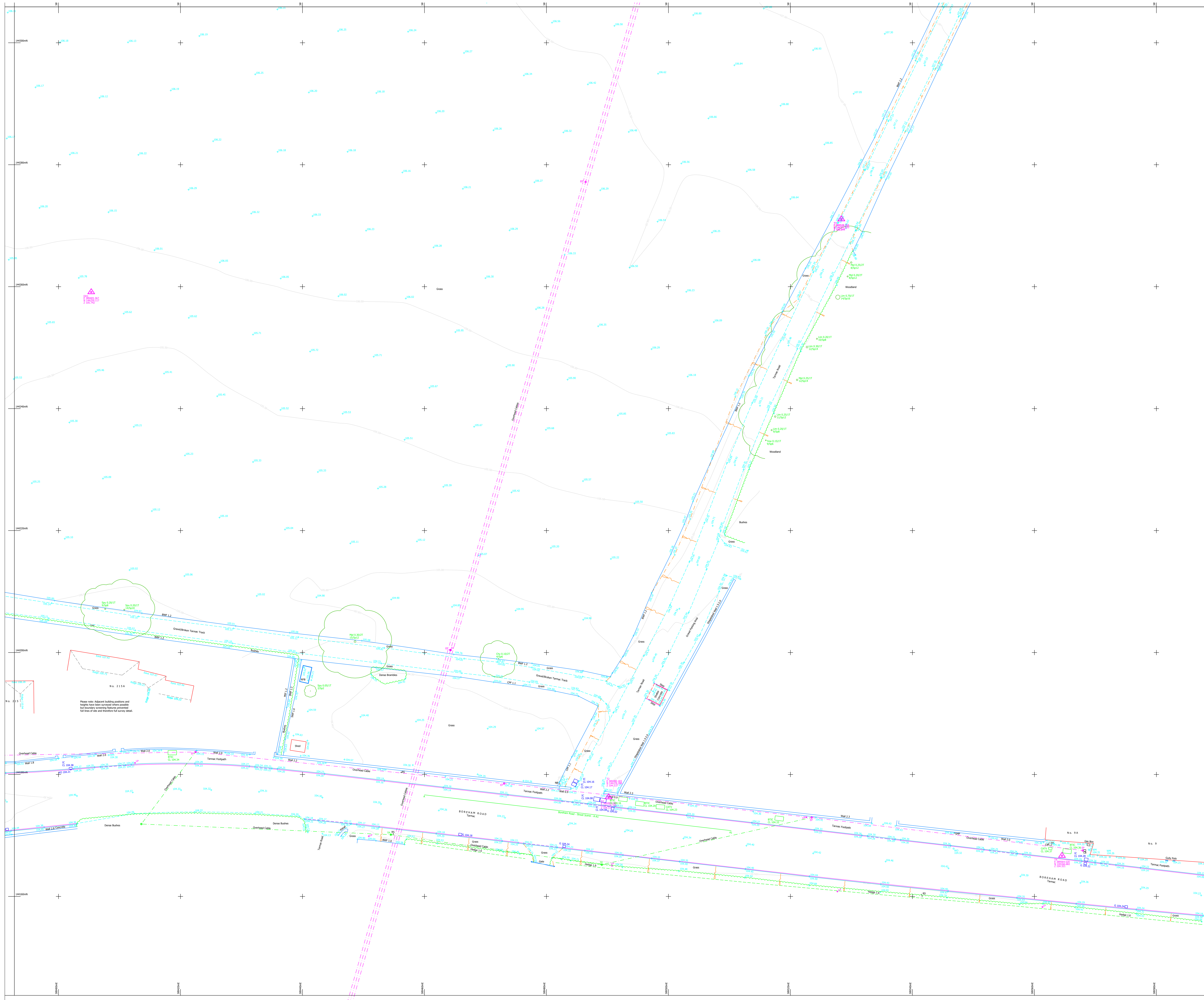
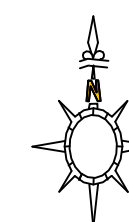
- Incorporation of suitable SuDS features into stormwater water management design;
- Proposed layout and levels to be designed to convey flows away from buildings and habitable areas toward the site low points and non-habited areas. The development will also simulate the pre-development flow paths;
- The proposed residential units will look to be raised above the surface water flood risk level to mitigate the risk of surface water flooding at the site

- 10.6. It is proposed that the surface water runoff from the site will be discharged into the ground via infiltration, in line with the drainage hierarchy. An infiltration basin and swales will be utilised to provide adequate stormwater storage for the runoff up to and including the 1 in 100-year +45% climate storm event.
- 10.7. Water quality treatment of runoff has been designed in accordance with the CIRIA C753 SuDS Manual. It has been shown that using Simple Index Approach, the current proposals provide adequate pollution hazard mitigation for the surface water.
- 10.8. The Long Term Storage requirement to provide storage for the additional runoff volume produced by the development has been satisfied by the proposed infiltration features and the proposed rate of surface water discharge.
- 10.9. The Half Drain Time for the infiltration features on site, have been shown to satisfy the requirement for Wiltshire Council and in DEFRA's Non-statutory technical guidance for Sustainable Drainage Systems.
- 10.10. To limit the impact of exceedance flow routes on the proposed development, the masterplan and levels will be designed to convey flows away from buildings and toward non-habited area and the lower points of the site. These routes also simulate the existing flow paths and therefore will not increase flood risk.
- 10.11. It is proposed that the foul water flows from the development be conveyed by gravity sewers and discharged into the existing Wessex Water sewer located within the site. The peak design rate for foul water has been determined (as a rate 4000 litres per day for each dwelling) as 6.3 l/s.
- 10.12. The proposals are consistent with the aims of the NPPF and PPG along with the aims of the Wiltshire Council's Core Strategy and the other relevant local guidance. The proposed drainage strategy will not increase flood risk for development site and the surrounding area.



**Appendix A**  
**Topographical Survey**



[illegible]

LEGEND

### OVERALL TREE SPECIES INFORMATION

|                |     |                     |     |
|----------------|-----|---------------------|-----|
| ALDER          | ALD | LONDON PLANE        | WAV |
| ASH            | ASH | MAGNOLIA            | WAG |
| ASPEN          | ASP | MAPLE               | WPL |
| BEECH          | BCH | OAK                 | OAK |
| CHERRY         | CHY | PINE                | PNC |
| CUM            | CUM | POPULAR             | POP |
| FIR            | FIR | SHOODOODS AND DOWNS | SDN |
| FRUIT          | FRT | ROVER               | RWN |
| HAWTHORN       | HAW | SILVER BIRCH        | SIB |
| HAZEL          | HAZ | SWEET CHESTNUT      | SCH |
| HOLLY          | HLY | WALNUT              | WNT |
| HORSE CHESTNUT | HCH | WILLOW              | WLV |
| LIME           | LIM | YEW                 | YEW |
| LOCUST         | LOC | GRASSES UNKNOWN     | SPU |
|                |     | SPOTTED             | OSP |

TREE ANNOTATIONS:

ONS: Tree Species / Tree Bole Size / No of Boles

| FENCE INFORMATION      |     | LEVEL INFORMATION   |     |
|------------------------|-----|---------------------|-----|
| BARBED WIRE FENCE      | BWF | RED LEVEL           | RL  |
| CHAIN LINK FENCE       | CLF | COVER LEVEL         | CL  |
| CHRISTNUT PALING FENCE | CPF | FLOR LEVEL          | FL  |
| CLIFF BOARD FENCE      | CBF | INVERT LEVEL        | IL  |
| CONCRETE SLAT FENCE    | CDF | CLUSE LEVEL         | CL  |
| CONJUGATED HIGH FENCE  | CHF | THRESHOLD LEVEL     | TL  |
| CORON MANILA           | CM  | POOL WATER          | FW  |
| HAWAIIAN               | HDL | SURFACE WATER       | SW  |
| IRON RAILINGS          | IRF | UNLIKE TO LIFT      | UTL |
| LEAKY LARD FENCE       | LLF |                     |     |
| MISCELLANEOUS FENCE    | MSF |                     |     |
| PAULSODE FENCE         | PSF |                     |     |
| PICKET FENCE           | PFF | SURFACE INFORMATION |     |
| POST AND CHAIN FENCE   | PCF | CONCRETE            | Cc  |
| POST AND RAIL FENCE    | PRF | BRICK PAVING        | BP  |
| POST AND WOOD FENCE    | PWF | CLOMBARD            | CL  |
| SECURITY FENCE         | SOF | PAVING SLABS        | PS  |
| STOCK WIRE FENCE       | SWF | RETAINING WALL      | RW  |
| TRUSS FENCE            | TFF | SCAFFOLD            | Sc  |
| WIRE MESH FENCE        | WMF | TACTILE PAVING      | TAP |

### FEATURE INFORMATION

|                       |      |                     |     |
|-----------------------|------|---------------------|-----|
| ROLLARD               | BO   | NAME PLATE          | NP  |
| TELECONS IC           | BTJC | NOTICE BOARD        | NB  |
| BUS STOP              | BS   | POST                | P   |
| CABLE TELEVISION IC   | CLTV | RAIN WATER PIPE     | RWP |
| READING ROOM          | RR   | RO                  | RS  |
| ELECTRICITY CABLE PIT | EA   | ROODING EYE         | RE  |
| SERVICE VEHICLE POLE  | EP   | SERVICE WAREER POST | SWP |
| FIRE HYDRANT          | PH   | SOIL VENT PIPE      | SNP |
| PLAC POLE             | PC   | STOP VALVE          | SV  |
| GUIDE POST            | GP   | STORM GLASS         | TP  |
| INSPECTION COVER      | IC   | TRAFFIC SIGNAL      | TS  |
| LAMP POST             | LP   | TRAFFIC SIGNALS IC  | TSC |
| LETTER BOX            | LB   | WASH OUT            | WO  |
| KEY OUTLET            | KO   | WATER METER         | WM  |

## REVISION

|   |   |
|---|---|
| 8 | 7 |
| 6 | 5 |
| 4 | 3 |
| 2 | 1 |

## GRID MAP

Level Datum:

Levels are related to OSGB15 derived from the GPS net

Grid:

Grid is rela



Encompass Surveys Ltd  
Yarmouth House  
1300 Parkway  
Solent Business Park  
Whiteley, Fareham  
Hampshire, PO15 7AX

Tel: (+44)2380 692002 Email: [info@encompass-surveys.co.uk](mailto:info@encompass-surveys.co.uk)  
Website: [encompass-surveys.co.uk](http://encompass-surveys.co.uk)

|  |             |                                   |
|--|-------------|-----------------------------------|
|  | Microscopic | Chromogenic, dark-field, electron |
|  |             |                                   |

Client: Bellway Homes

|                  |           |
|------------------|-----------|
| Survey Location: | Home Farm |
|------------------|-----------|

Location: Boreham Road  
Warminster, BA12 9HF

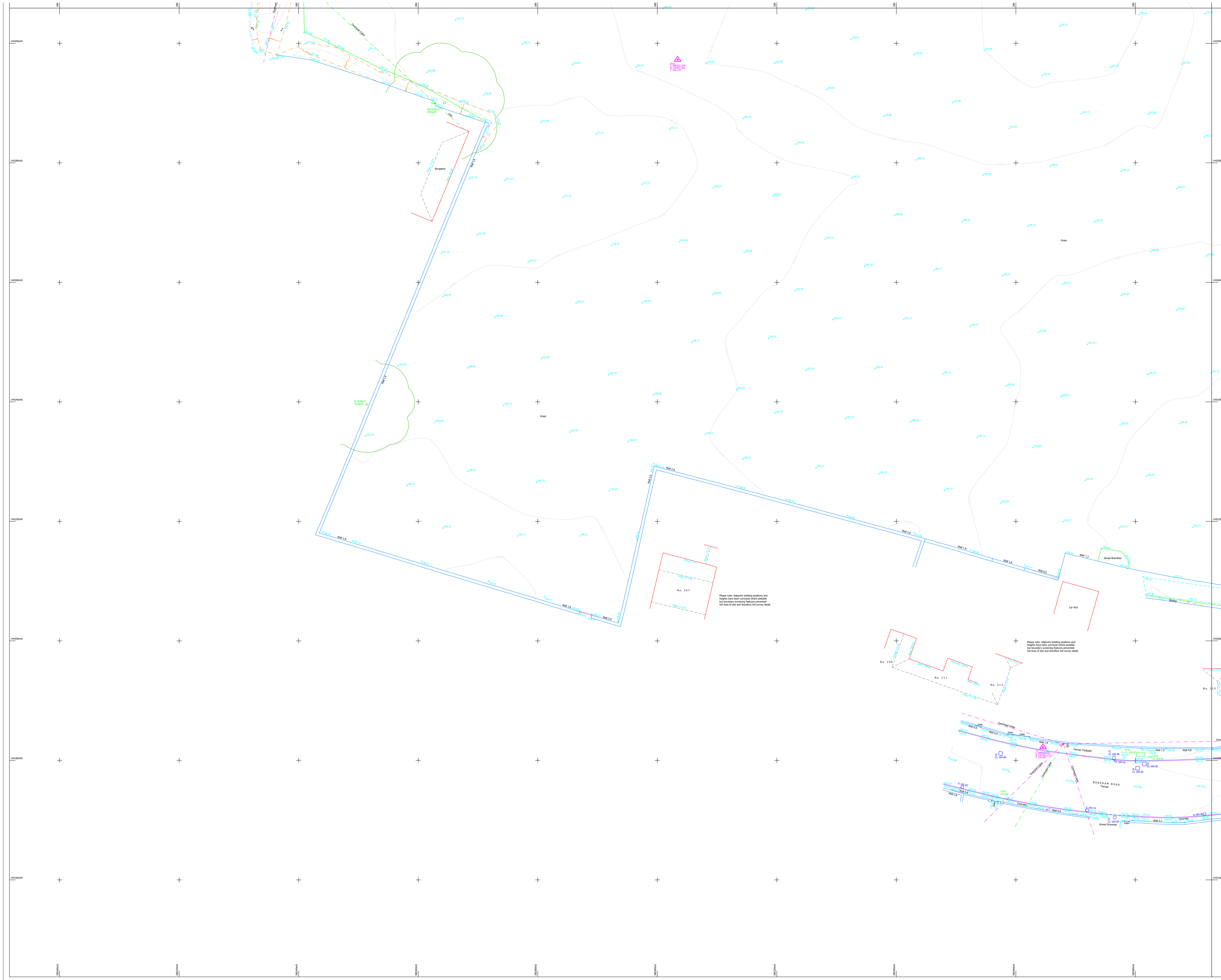
|              |               |        |            |
|--------------|---------------|--------|------------|
| Survey type: | Topographical | Scale: | 1:200 @ A0 |
|--------------|---------------|--------|------------|

|               |                     |       |          |
|---------------|---------------------|-------|----------|
| Decision ref: | ENC/2001/25/2003.62 | Date: | Jan 2005 |
|---------------|---------------------|-------|----------|

|              |                    |       |          |
|--------------|--------------------|-------|----------|
| Drawing Ref. | ENC/200123/3797-52 | Date: | Jan 2023 |
|              |                    |       |          |

|                 |                 |
|-----------------|-----------------|
| Drawn/QA: DH/BF | Plot No. 1 of 8 |
|-----------------|-----------------|





**NOTES:**

Drainage Inverts and Closures are lifted where possible and all drainage invert information has been obtained through visual inspection only, with the exception of the Three Rivers Drainage Invert, which was measured and guaranteed. Where drainage is of critical importance we suggest the services of a specialist drainage expert be used.

Every effort has been made to identify and detail all trees on site and to provide a description of their condition and any special requirements. Specialist such as an arborist. Tree spread and heights are indicative GPS data is relative to the time and date of survey. GPS levels and trees are obtained using industry standard guidelines and care is taken regarding the quality of the GPS network at the time of survey. All trees are measured, surveyed and identified by name, Height and Vertical Datum. Data are established from a central site fix and orientation station utilizing GNSS correction.

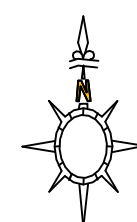
**Survey notes:**

Survey specification is linked to the original purpose of the survey and the client's requirements. It is not the intention of this purpose only. Survey is accurate within limitations of site conditions at the time of survey. The survey is not intended to be used as a basis for any claim of sight or dense vegetation, critical dimensions and positions should be verified following suitable clearance.

Survey detail and accuracy shown is relative to the plotting scale.

**Copyright:**

All rights reserved. Information Copyright Encampment Surveys Ltd (2009). All rights reserved.



### LEGEND

### OVERALL TREE SPECIES INFORMATION

|               |     |                 |      |
|---------------|-----|-----------------|------|
| ALDER         | ALD | LONDON PLANE    | LMN  |
| ASH           | ASH | MAGNOLIA        | MAIG |
| ASPEN         | ASP | MARPLE          | MPL  |
| BEECH         | BCH | OAK             | OAK  |
| CHERRY        | CH  | PINE            | PNE  |
| ELM           | ELM | POPULAR         | POP  |
| FIR           | FIR | RHODODENDRONS   | RDN  |
| FRUIT         | FRT | ROWAN           | RWN  |
| HAWTHORN      | HAW | SILVER BEECH    | SBE  |
| HAZEL         | HAZ | SPRING OYSTREE  | SOB  |
| HOLLY         | HOL | WALNUT          | WNT  |
| HONEY OYSTREE | HCH | WILLOW          | WLW  |
| LIME          | LIM | YEW             | YEW  |
| LOCUST        | LOC | SPECIES UNKNOWN | SUN  |
|               |     | COPPOD          | COP  |

**TREE ANNOTATIONS:** Tree Species / Tree Bole Size / No of Boles  
Tree Height / Tree Canopy Spread

| FENCE INFORMATION     |     | LEVEL INFORMATION |     |
|-----------------------|-----|-------------------|-----|
| BARBED WIRE FENCE     | BWF | BED LEVEL         | BL  |
| CHAIN LINK FENCE      | CLF | COVER LEVEL       | CL  |
| CHESTNUT PALING FENCE | CPF | FLOOR LEVEL       | FL  |
| CLOSE BOARD FENCE     | CBF | INVERT LEVEL      | IL  |
| COMPOSITE SLAT FENCE  | CSF | OUTFALL LEVEL     | OL  |
| CONCRETE IRON FENCE   | CIF | THRESHOLD LEVEL   | TH  |
| CRASH BARRIER         | CBR | FOUL WATER        | FW  |
| HANDRAIL              | HDL | SURFACE WATER     | SW  |
| IRON RAILINGS         | IRF | UNABLE TO LIFT    | UTL |

|                     |     |                     |
|---------------------|-----|---------------------|
| MISCELLANEOUS FENCE | PSF | SURFACE INFORMATION |
| PALISADE FENCE      | PSF |                     |

|                      |     |                |       |
|----------------------|-----|----------------|-------|
| POST AND CHAIN FENCE | PCF | CONCRETE       | Cc    |
| POST AND RAIL FENCE  | PRF | BROOK PAVING   | Bp    |
| POST AND WIRE FENCE  | PWF | FLOWERBED      | FB    |
| SECURITY FENCE       | SOF | PAVING SLABS   | PS    |
| STOCK WIRE FENCE     | SWF | RETAINING WALL | RWall |
| TRELLIS FENCING      | TLP | SCALPINGS      | Scalp |
| WIRE MESH FENCE      | WMF | TACTILE PAVING | Tac   |

### FEATURE INFORMATION

|                     |      |                    |      |
|---------------------|------|--------------------|------|
| ROLLAD              | BO   | NAME PLATE         | NP   |
| TELEVISION IC       | BTIC | NOTICE BOARD       | NB   |
| BUS STOP            | BS   | POST               | P    |
| CABLE TELEVISION IC | CATV | RAIN WATER PIPE    | RWP  |
| EARTHING ROD        | ER   | ROAD SIGN          | RS   |
| ELECTRIC CABLE PIT  | ELCP | ROOMING EYE        | RE   |
| ELECTRICITY POLE    | EP   | SERVICE WATER STOP | SWP  |
| FIRE HYDRANT        | PH   | SOIL VENT PIPE     | SVP  |
| FLAG POLE           | FP   | STOP VALVE         | SV   |
| GULCH POST          | GP   | TELEPHONE POLE     | TP   |
| INSPECTION COVER    | IC   | TRAFFIC SIGNAL     | TS   |
| LANE POST           | LP   | TRAFFIC SIGNALS IC | TSIC |
| LETTER BOX          | LB   | WASH CUP           | WC   |
| NEER OUTLET         | NO   | WATER METER        | WM   |

## REVISION

## GRID MAP

|   |   |
|---|---|
| 8 |   |
| 6 |   |
| 4 | 3 |
| 2 | 1 |

Level Datum:

Levels are related to OSGB15 derived from the GPS net

Grid:

Grid is rela



Encompass Surveys Ltd  
Yarmouth House  
1300 Parkway  
Solent Business Park  
Whiteley, Fareham  
Hampshire, PO15 7AX

Tel: (+44)2380 692002    Email: [info@encompass-surveys.co.uk](mailto:info@encompass-surveys.co.uk)  
Website: [encompass-surveys.co.uk](http://encompass-surveys.co.uk)

|  |            |                                  |
|--|------------|----------------------------------|
|  | Procedural | Grouping and delivery of program |
|  |            |                                  |

|         |               |
|---------|---------------|
| Client: | Bellway Homes |
|---------|---------------|

|           |              |
|-----------|--------------|
| Survey    | Home Farm    |
| Location: | Boreham Road |

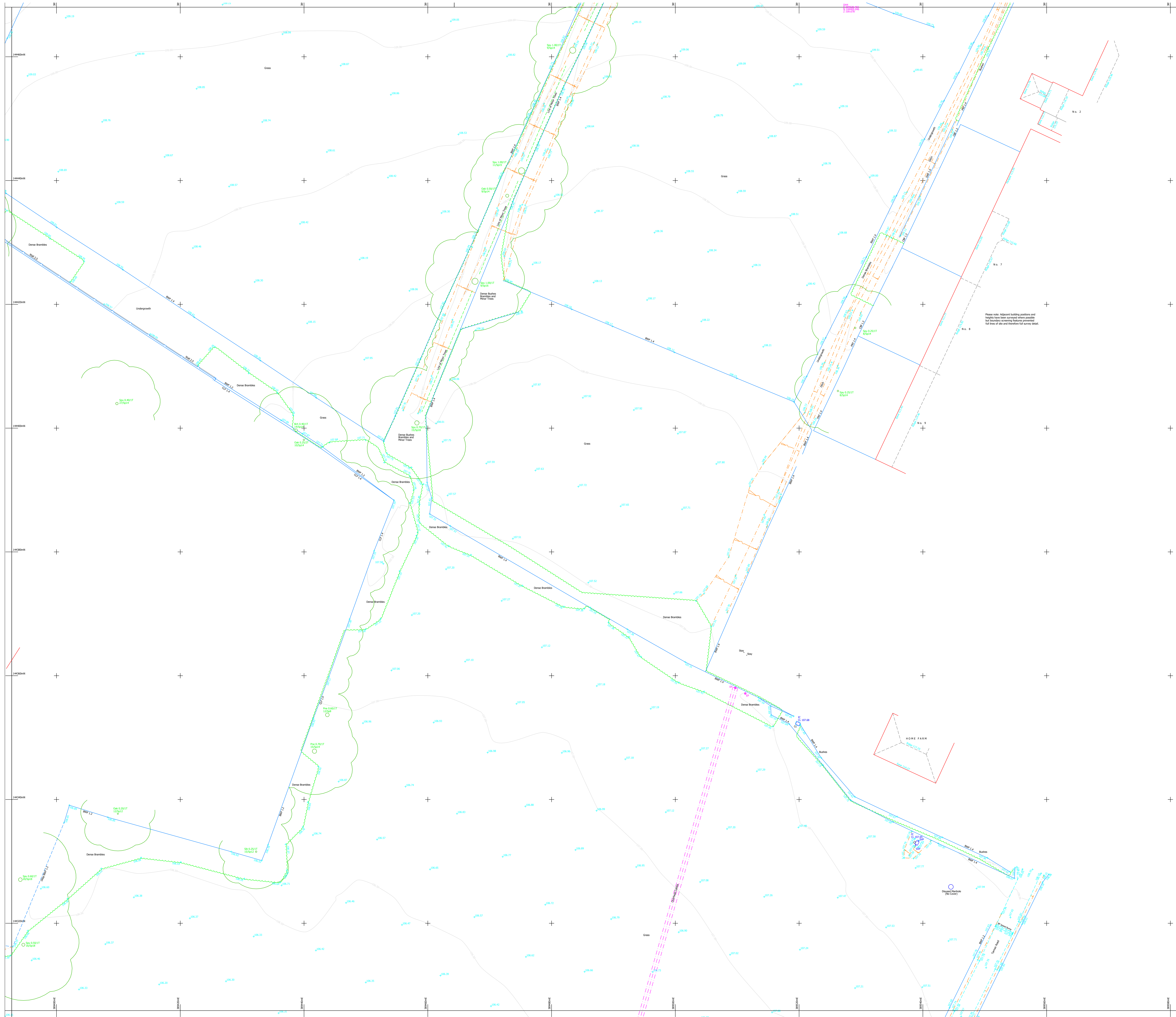
|                      |              |
|----------------------|--------------|
| Warminster, BA12 9HF |              |
| 01934 211111         | 01934 211111 |

|              |               |        |            |
|--------------|---------------|--------|------------|
| Survey type: | Topographical | Scale: | 1:200 (A0) |
|              |               |        |            |

|              |                    |       |          |
|--------------|--------------------|-------|----------|
| Drawing ref: | ENC/200125/3797-S2 | Date: | Jan 2025 |
|              |                    |       |          |

|                 |                 |
|-----------------|-----------------|
| Drawn/QA: CH/BF | Plot No. 2 of 8 |
|-----------------|-----------------|



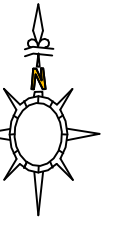


**Drainage:**  
Inspection Covers are lifted where possible and all drainage invert formation has been obtained through visual inspection only, with entry into manholes. Therefore the complete accuracy cannot be guaranteed. Where drainage is of critical importance we suggest the services of a specialist drainage expert be used.

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

GPS detail is relative to the time and date of survey. GPS levels and data 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:  
 this survey information is Copyright Encompass Surveys Ltd (2009).  
 All rights reserved.



### LEGEND

### OVERALL TREE SPECIES INFORMATION

|                |     |                 |     |
|----------------|-----|-----------------|-----|
| ALDER          | ALD | LONDON PLANE    | LWN |
| ASH            | ASH | MAGNOLIA        | MAG |
| ASPEN          | ASP | MAPLE           | MPL |
| BEECH          | BCH | OAK             | OAK |
| CHERRY         | CHY | PINE            | PNE |
| ELM            | ELM | POPLAR          | POP |
| FIR            | FR  | RHODODENDRONS   | RDN |
| FRUIT          | FR  | ROSE            | ROS |
| WAX            | WAX | SILVER BIRCH    | SB  |
| WATHERN        | WAZ | SPRUE CHESTNUT  | SCN |
| HOLLY          | HL  | WALNUT          | WNT |
| HORSE CHESTNUT | HCH | WILLOW          | WLN |
| LYME           | LYM | YEW             | YEW |
| LOCUST         | LCC | SPECIES UNKNOWN | SPI |
|                |     | COPPOD          | COP |

**TREE ANNOTATIONS:** Tree Species / Tree Bole Size / No of Boles  
Tree Height / Tree Canopy Spread

| FENCE INFORMATION     |     | LEVEL INFORMATION |     |
|-----------------------|-----|-------------------|-----|
| BARBED WIRE FENCE     | BWF | BED LEVEL         | BL  |
| CHAIN LINK FENCE      | CLF | CORNER LEVEL      | CL  |
| CHESTNUT PALING FENCE | CPF | FLOOR LEVEL       | FL  |
| CLOSE BOARD FENCE     | CBF | INVERT LEVEL      | IL  |
| CONCRETE SLAT FENCE   | CCF | OUTFALL LEVEL     | OL  |
| CORRUGATED IRON FENCE | CIF | THRESHOLD LEVEL   | THL |
| CRASH BARRIER         | CBR | POOL WATER        | PW  |
| HANDRAIL              | HDL | SURFACE WATER     | SW  |
| IRON RAILINGS         | IRF | UNABLE TO LIFT    | UL  |
| LARCH PAL FENCE       | LPF | WATER LEVEL       | WL  |

PSF PSF SURFACE INFORM.

|                      |     |                |       |
|----------------------|-----|----------------|-------|
| POST AND CHAIN FENCE | PCF | CONCRETE       | Cc    |
| POST AND RAIL FENCE  | PRF | BLOCK PAVING   | BP    |
| POST AND WIRE FENCE  | PWF | FLOWERBED      | FB    |
| SECURITY FENCE       | SOF | PAVING SLABS   | PS    |
| STOCK WIRE FENCE     | SWF | RETAINING WALL | RWall |
| TRELLIS FENCING      | TLF | SCALPING       | Scalp |
| WIRE MESH FENCE      | WMF | TACTILE PAVING | Tac   |

### FEATURE INFORMATION

|                      |      |                      |      |
|----------------------|------|----------------------|------|
| RO LAD               | BO   | NAME PLATE           | NP   |
| TELECOMS IC          | BTIC | NOTICE REGARD        | NB   |
| BUS STOP             | BS   | POST                 | P    |
| CABLE TELEVISION IC  | CTV  | RAIN WATER PIPE      | RWP  |
| ELECTRIFY ROAD       | ER   | ROAD SIGN            | RS   |
| EARTHQUAKE CABLE PIT | ELP  | ROCKING EYE          | RE   |
| ELECTRICITY POLE     | EP   | SERVICE MANAGER POST | SMPP |
| FIRE HYDRANT         | PH   | SQL VENT PIPE        | SWP  |
| FLAG POLE            | FP   | STOP VALVE           | SV   |
| GLIDE POST           | GP   | TELEGRAPH POLE       | TP   |
| INSPECTION COVER     | IC   | TRAFFIC SIGNAL       | TS   |
| POST POST            | PP   | TRAFFIC MANUALS IC   | TMIC |
| LETTER BOX           | LB   | WASH OUT             | WO   |
| SEWER OUTLET         | LO   | WATER METER          | WM   |

## REVISIONS

### GRID MAP

|   |   |
|---|---|
| 8 | 7 |
| 6 | 5 |
| 4 | 3 |
| 2 | 1 |

Level Datum:

id:  
id is related to OSGB15 derived from the GPS network

Orthopoint:



Encompass Surveys Ltd  
Yarmouth House  
1300 Parkway  
Solent Business Park  
Whiteley, Fareham  
Hampshire, PO15 7AX

Tel: (+44)2380 692002  
Email: [info@encompass-surveys.co.uk](mailto:info@encompass-surveys.co.uk)  
Website: [encompass-surveys.co.uk](http://encompass-surveys.co.uk)

|         |               |
|---------|---------------|
| Client: | Bellway Homes |
|---------|---------------|

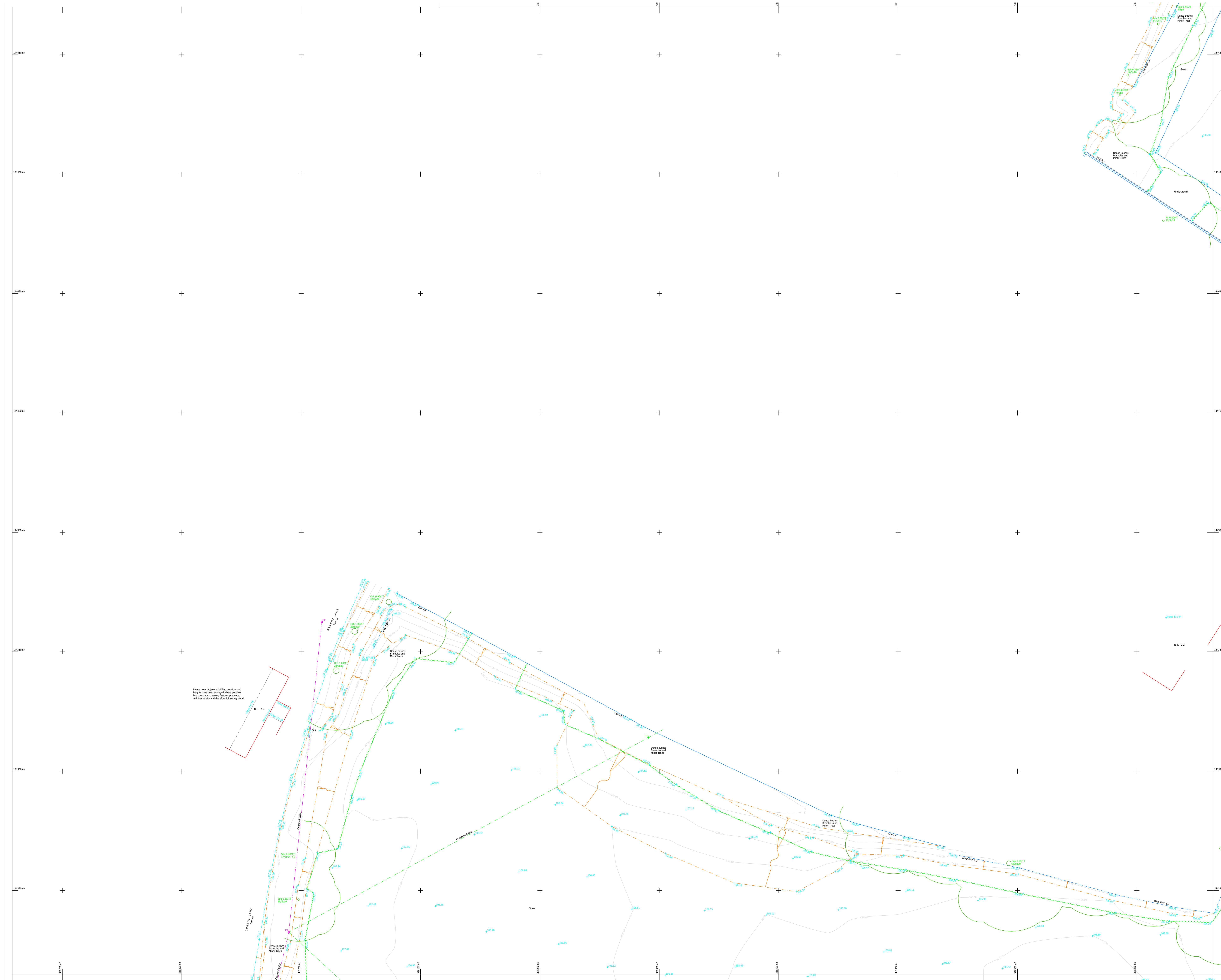
|                  |                                                   |
|------------------|---------------------------------------------------|
| Survey location: | Home Farm<br>Boreham Road<br>Warminster, BA12 9HF |
|------------------|---------------------------------------------------|

|              |               |        |          |
|--------------|---------------|--------|----------|
| Survey type: | Topographical | Scale: | 1:200@A0 |
|--------------|---------------|--------|----------|

|             |                    |       |          |
|-------------|--------------------|-------|----------|
| rawing ref: | ENC/200125/3797-S2 | Date: | Jan 2025 |
|-------------|--------------------|-------|----------|

|           |       |          |        |
|-----------|-------|----------|--------|
| Drawn/QA: | CH/BF | Plot No. | 3 of 8 |
|-----------|-------|----------|--------|





**NOTES:**

Drainage Inverts are lifted where possible and all drainage invert information has been obtained through visual inspection only, supported by a survey. Therefore, there is no guarantee that the information is guaranteed. Where drainage is of critical importance we suggest the services of a specialist drainage expert be used.

Every effort has been made to identify and detail all trees on site and to provide a detailed description of the trees. However, a specialist such as an arborist. Tree spread and heights are indicative only.

GPS detail is relative to the time and date of survey. GPS levels and elevations are obtained using industry standard guidelines and can vary according to the quality of the GPS network at the time of survey. The survey was carried out using a Leica total station and a Hi-correction and Vertical Datum are established from a central site fix and orientation station utilising GNS3 correction.

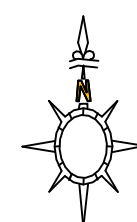
**Survey notes:**

Survey specification is linked to the original purpose of the survey and the purpose of the survey is to be used for the purpose only. Survey is accurate within limitations of site conditions at the time of survey. The survey is not to be used for any other purpose, such as light or dense vegetation, critical dimensions and positions should be verified following suitable clearance.

Survey detail and accuracy shown is relative to the plotting scale.

**Copyright:**

All rights reserved. Information is copyright Encapsula Maps Ltd (2009). All rights reserved.



### LEGEND

### OVERALL TREE SPECIES INFORMATION

|                |     |                 |     |
|----------------|-----|-----------------|-----|
| ALDER          | ALD | LONDON PLANE    | WAV |
| ASH            | ASH | MAGNOLIA        | WAG |
| ASPEN          | ASP | MAPLE           | WPL |
| BEECH          | BCH | OAK             | OAK |
| CHERRY         | CHY | PINE            | PNC |
| CUM            | CUM | POPULAR         | POP |
| FIR            | FIR | SHODONCEDROWS   | SDN |
| FRUIT          | FRT | ROVER           | RBN |
| WATHTON        | WAW | SILVER BIRCH    | SBN |
| HAZEL          | HAZ | SWEET CHESTNUT  | SCN |
| HOLLY          | HLY | WALNUT          | WNT |
| HORSE CHESTNUT | HCH | WILLOW          | WLV |
| LIME           | LIM | YEW             | YEW |
| LOCUST         | LOC | GRACEUS UNKNOWN | SUN |
|                |     | SPYGLASS        | OSP |

**TREE ANNOTATIONS:** Tree Species / Tree Bole Size / No of Boles  
Tree Height / Tree Canopy Spread

| FENCE INFORMATION     |     | LEVEL INFORMATION |     |
|-----------------------|-----|-------------------|-----|
| BARBED WIRE FENCE     | BWF | RED LEVEL         | RL  |
| CHAIN LINK FENCE      | CLF | COVER LEVEL       | CL  |
| CHESTNUT PALING FENCE | CPF | FLOOR LEVEL       | FL  |
| CLOZE BOARD FENCE     | CBF | INVERT LEVEL      | IL  |
| CONCRETE CAST FENCE   | CCF | OUTFALL LEVEL     | OL  |
| CORRUGATED IRON FENCE | CIF | THRESHOLD LEVEL   | TH  |
| CRASH BARRIER         | CBL | POLE WATER        | PW  |
| HANDRAIL              | HDL | SUPPLY WATER      | SW  |
| IRON RAILINGS         | IRF | UNABLE TO LIFT    | UTL |
| LARCH LATH FENCE      | LLF | WATER LEVEL       | WL  |

|                     |     |                     |
|---------------------|-----|---------------------|
| MISCELLANEOUS FENCE | MSF | SURFACE INFORMATION |
| PALISADE FENCE      | PSF |                     |

|                      |     |                |       |
|----------------------|-----|----------------|-------|
| POCKET FENCE         | P97 |                |       |
| POST AND CHAIN FENCE | PCF | CONCRETE       | Cc    |
| POST AND RAIL FENCE  | PRF | BRICK PAVING   | BP    |
| POST AND WIRE FENCE  | PWF | FLOWERBED      | FB    |
| SECURITY FENCE       | SOF | PAVING SLABS   | PS    |
| STOCK WIRE FENCE     | SWF | RETAINING WALL | RWall |
| TRELIS FENCING       | TLF | SCALPINGS      | Scalp |
| WIRE MESH FENCE      | WMF | TACTILE PAVING | Tac   |

#### FEATURE INFORMATION

|                       |      |                     |     |
|-----------------------|------|---------------------|-----|
| ROLLAID               | BO   | NAME PLATE          | NP  |
| TELECONS IC           | BTJC | NOTICE BOARD        | NB  |
| BUS STOP              | BS   | POST                | P   |
| CABLE TELEVISION IC   | CLV  | RAND WATER PIPE     | RWP |
| EASTING ROAD          | ED   | ROAD SIGN           | RS  |
| ELECTRICITY CABLE PIT | ECP  | ROOOFING EYE        | RE  |
| ELECTRICITY POLE      | EP   | SERVICE WAREER POST | SWP |
| FIRE HYDRANT          | PH   | SOIL VENT PIPE      | SV  |
| FLAG POLE             | GP   | STOP VALVE          | SV  |
| FLAG POST             | GP   | TELEGRAM POLE       | TP  |
| INSPECTION COVER      | IC   | TRAFFIC SIGNAL      | TS  |
| LAMP POST             | LP   | TRAFFIC SIGNALS IC  | TSC |
| LETTER BOX            | LB   | WASH OUT            | WO  |
| KEY OUTLET            | KO   | WATER METER         | WM  |

## REVISIONS

|   |   |
|---|---|
| 8 | 7 |
| 6 | 5 |
| 4 | 3 |
| 2 | 1 |

Level Datum:

Grid:  
Grid is related to GCS/ELE derived from the GDS internally.

Northpoint:



Encompass Surveys Ltd  
Yarmouth House  
1300 Parkway  
Solent Business Park  
Whiteley, Fareham  
Hampshire, PO15 7AX

Tel: (+44)2380 692002 Email: [info@encompass-surveys.co.uk](mailto:info@encompass-surveys.co.uk)  
Website: [encompass-surveys.co.uk](http://encompass-surveys.co.uk)

|                  |                                                   |
|------------------|---------------------------------------------------|
| Client:          | Bellway Homes                                     |
| Survey Location: | Home Farm<br>Boreham Road<br>Worminster, BA12 9HF |

|                            |                 |
|----------------------------|-----------------|
| Survey type: Topographical | Scale: 1:200@A0 |
|----------------------------|-----------------|

|              |                    |          |          |
|--------------|--------------------|----------|----------|
| Drawing ref: | ENC/200125/3797-S2 | Date:    | Jan 2025 |
| Drawn/OA:    | DH/BF              | Plot No. | 4 of 8   |















**NOTES:**

Drainage Inverts are fitted where possible and all drainage invert information has been obtained through visual inspection only, with the exception of the Three Rivers Sewerage Authority (TRSA) sewerage system, which is guaranteed. Where drainage is of critical importance we suggest the services of a specialist drainage expert be used.

Every effort has been made to identify and detail all trees on site and to provide a list of the trees on site. However, we are not a tree survey specialist such as an arborist. Tree spread and heights are indicative only.

GPS Detail is relative to the time and date of survey. GPS levels and grids are obtained using industry standard guidelines and can vary according to the quality of the GPS network at the time of survey.

Horizontal and Vertical Datum are based on the Ordnance Survey datum. Horizontal and Vertical Datums are established from a central site fix and coordinate orientation station utilizing OSNG control data.

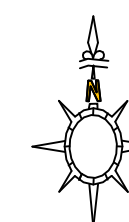
**Survey notes:**

Survey specification is linked to the original purpose of the survey and the survey is not to be used for any purpose other than that for which it was undertaken. Survey is accurate within limitations of site conditions at the time of survey and is not to be relied upon to survey due to the presence of a light or dense vegetation, or other site conditions and positions should be verified following suitable ground inspection.

Survey detail obtained and shown is relative to the plotting scale.

**Copyright:**

This survey information is Copyright Encompass Surveys Ltd (2009). All rights reserved.



### LEGEND

### OVERALL TREE SPECIES INFORMATION

|                |     |                 |      |
|----------------|-----|-----------------|------|
| ALDER          | ALD | LONDON PLANE    | WAV  |
| ASH            | ASH | MAGNOLIA        | WAG  |
| ASPEN          | ASP | MAPLE           | WPL  |
| BEECH          | BCH | OAK             | OAK  |
| CHERRY         | CHY | PINE            | PNC  |
| CUM            | CUM | POPULAR         | POP  |
| FIR            | FIR | REDWOODS/DWARFS | RDN  |
| FRUIT          | FRT | ROVER           | RWN  |
| HAWTHORN       | HAW | SILVER BIRCH    | SIB  |
| HAZEL          | HAZ | SWEET CHESTNUT  | SCH  |
| HOLLY          | HLY | WALNUT          | WNT  |
| HORSE CHESTNUT | HCH | WILLOW          | WLV  |
| LIME           | LIM | YEW             | YEW  |
| LOCUST         | LOC | SPICES UNKNOWN  | SPU  |
|                |     | UNIDENTIFIED    | UNID |

TREE ANNOTATIONS:

Tree Species / Tree bole size / No. of Boles  
Tree Height / Tree Canopy Spread

## FENCE INFORMATION

|                        |     |                 |      |
|------------------------|-----|-----------------|------|
| BARRIER WIRE FENCE     | BWF | BED LEVEL       | BL   |
| CHAIN LINK FENCE       | CLF | COVER LEVEL     | CL   |
| CORNUSTIP PALING FENCE | CPF | FLOOR LEVEL     | FL   |
| CLOSE BOARD FENCE      | CBF | INVERT LEVEL    | IL   |
| CONCRETE SLAT FENCE    | CSF | OUTLINE LEVEL   | OL   |
| COMBUSTED FLAME FENCE  | CCF | THRESHOLD LEVEL | TL   |
| CORNER BARRIER         | CB  | TOOL WATER      | TW   |
| HANDRAIL               | HDL | SURFACE WATER   | SW   |
| IRON RAILINGS          | IRF | UNABLE TO LIFT  | UNL  |
| LATCH LAP FENCE        | LPF | WATER LEVEL     | WL   |
| MISCELLANEOUS FENCE    | MSF |                 |      |
| PAULISADE FENCE        | PSF |                 |      |
| POCKET FENCE           | POF |                 |      |
| POST AND CHAIN FENCE   | PCF | CONCRETE        | Cc   |
| POST AND RAIL FENCE    | PRF | BRICK PAVING    | BP   |
| POST AND WIRE FENCE    | PWF | FLOORED         | F    |
| SECURITY FENCE         | SOF | PAVING SLABS    | PS   |
| STEEL WIRE FENCE       | SWF | RETAINING WALL  | RW   |
| TROUS PENCING          | TLP | SCALPINGS       | Scap |
| WIRE MESH FENCE        | WMF | TACTILE PAVING  | TP   |

### FEATURE INFORMATION

|                       |      |                     |     |
|-----------------------|------|---------------------|-----|
| ROLLARD               | BO   | NAME PLATE          | NP  |
| TELECONS IC           | BTJC | NOTICE BOARD        | NB  |
| BUS STOP              | BS   | POST                | P   |
| CABLE TELEVISION IC   | CLV  | RAIN WATER PIPE     | RWP |
| EASTING ROAD          | ER   | RO                  | RS  |
| ELECTRICITY CABLE PIT | EP   | ROODING EYE         | RE  |
| ELECTRICITY POLE      | EP   | SERVICE WAREER POST | SWP |
| FIRE HYDRANT          | PH   | SOIL VENT PIPE      | SNV |
| FLAG POLE             | FP   | STOP VALVE          | SV  |
| GLIDE POST            | GP   | STORM GLASS         | TP  |
| INSPECTION COVER      | IC   | TRAFFIC SIGNAL      | TS  |
| LAMP POST             | LP   | TRAFFIC SIGNALS IC  | TSC |
| LETTER BOX            | LB   | WASH OUT            | WO  |
| KEY OUTLET            | KO   | WATER METER         | WM  |

## REVISIONS

## GRID MAP

|   |   |
|---|---|
| 8 | 7 |
| 6 | 5 |
| 4 | 3 |
| 2 | 1 |

Level Datum:

Levels are related to OSGB15 derived from the GPS network

|  |  |
|--|--|
|  |  |
|  |  |

Grid:  
Grid is relat



Encompass Surveys Ltd  
Yarmouth House  
1300 Parkway  
Solent Business Park  
Whiteley, Fareham  
Hampshire, PO15 7AX

Tel: (+44)2380 692002 Email: [info@encompass-surveys.co.uk](mailto:info@encompass-surveys.co.uk)  
Website: [encompass-surveys.co.uk](http://encompass-surveys.co.uk)

|  |  |
|--|--|
|  |  |
|--|--|

Client: Bellway Homes

|        |           |
|--------|-----------|
| Survey | Home Farm |
|--------|-----------|

Location: Boreham Road  
Middletown, CT

|                |
|----------------|
| Warminster, BA |
|----------------|

Survey type: Topographical

Drawing ref: ENC/200125/37

|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |        |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 2057 | 2058 | 2059 | 2060 | 2061 | 2062 | 2063 | 2064 | 2065 | 2066 | 2067 | 2068 | 2069 | 2070 | 2071 | 2072 | 2073 | 2074 | 2075 | 2076 | 2077 | 2078 | 2079 | 2080 | 2081 | 2082 | 2083 | 2084 | 2085 | 2086 | 2087 | 2088 | 2089 | 2090 | 2091 | 2092 | 2093 | 2094 | 2095 | 2096 | 2097 | 2098 | 2099 | 2100 | 2101 | 2102 | 2103 | 2104 | 2105 | 2106 | 2107 | 2108 | 2109 | 2110 | 2111 | 2112 | 2113 | 2114 | 2115 | 2116 | 2117 | 2118 | 2119 | 2120 | 2121 | 2122 | 2123 | 2124 | 2125 | 2126 | 2127 | 2128 | 2129 | 2130 | 2131 | 2132 | 2133 | 2134 | 2135 | 2136 | 2137 | 2138 | 2139 | 2140 | 2141 | 2142 | 2143 | 2144 | 2145 | 2146 | 2147 | 2148 | 2149 | 2150 | 2151 | 2152 | 2153 | 2154 | 2155 | 2156 | 2157 | 2158 | 2159 | 2160 | 2161 | 2162 | 2163 | 2164 | 2165 | 2166 | 2167 | 2168 | 2169 | 2170 | 2171 | 2172 | 2173 | 2174 | 2175 | 2176 | 2177 | 2178 | 2179 | 2180 | 2181 | 2182 | 2183 | 2184 | 2185 | 2186 | 2187 | 2188 | 2189 | 2190 | 2191 | 2192 | 2193 | 2194 | 2195 | 2196 | 2197 | 2198 | 2199 | 2200 | 2201 | 2202 | 2203 | 2204 | 2205 | 2206 | 2207 | 2208 | 2209 | 2210 | 2211 | 2212 | 2213 | 2214 | 2215 | 2216 | 2217 | 2218 | 2219 | 2220 | 2221 | 2222 | 2223 | 2224 | 2225 | 2226 | 2227 | 2228 | 2229 | 2230 | 2231 | 2232 | 2233 | 2234 | 2235 | 2236 | 2237 | 2238 | 2239 | 2240 | 2241 | 2242 | 2243 | 2244 | 2245 | 2246 | 2247 | 2248 | 2249 | 2250 | 2251 | 2252 | 2253 | 2254 | 2255 | 2256 | 2257 | 2258 | 2259 | 2260 | 2261 | 2262 | 2263 | 2264 | 2265 | 2266 | 2267 | 2268 | 2269 | 2270 | 2271 | 2272 | 2273 | 2274 | 2275 | 2276 | 2277 | 2278 | 2279 | 2280 | 2281 | 2282 | 2283 | 2284 | 2285 | 2286 | 2287 | 2288 | 2289 | 2290 | 2291 | 2292 | 2293 | 2294 | 2295 | 2296 | 2297 | 2298 | 2299 | 2300 | 2301 | 2302 | 2303 | 2304 | 2305 | 2306 | 2307 | 2308 | 2309 | 2310 | 2311 | 2312 | 2313 | 2314 | 2315 | 2316 | 2317 | 2318 | 2319 | 2320 | 2321 | 2322 | 2323 | 2324 | 2325 | 2326 | 2327 | 2328 | 2329 | 2330 | 2331 | 2332 | 2333 | 2334 | 2335 | 2336 | 2337 | 2338 | 2339 | 2340 | 2341 | 2342 | 2343 | 2344 | 2345 | 2346 | 2347 | 2348 | 2349 | 2350 | 2351 | 2352 | 2353 | 2354 | 2355 | 2356 | 2357 | 2358 | 2359 | 2360 | 2361 | 2362 | 2363 | 2364 | 2365 | 2366 | 2367 | 2368 | 2369 | 2370 | 2371 | 2372 | 2373 | 2374 | 2375 | 2376 | 2377 | 2378 | 2379 | 2380 | 2381 | 2382 | 2383 | 2384 | 2385 | 2386 | 2387 | 2388 | 2389 | 2390 | 2391 | 2392 | 2393 | 2394 | 2395 | 2396 | 2397 | 2398</ |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--------|

Drawn/QA: DH/BF

---







**Appendix B**  
**Indicative Masterplan**



All Intellectual Property Rights (including copyright) in or arising out of this drawing and the building works depicted are owned by Pegasus Planning Group Ltd (Pegasus Group) and may not be reproduced and/or copied without a written licence. Pegasus Group accepts no liability for any use of this drawing other than for its original purpose and by the original client except in circumstances where approval for use has been given by Pegasus Group in writing. Use only written dimensions. Drawing prepared for planning application purposes only. DO NOT SCALE (or use) for construction, sales or any other purpose. Any queries to be reported to Pegasus Group for clarification. © Pegasus Planning Group Limited. © Crown copyright and database right OS 100042936. Promap. Licence number 1000042936. Terms & conditions @pegasusgroup.co.uk

Issue:



KEY: SITE LAYOUT

- APPLICATION BOUNDARY
- PROPOSED SITE ACCESS

SURFACE MATERIALS:

- GARDEN/POS/HIGHWAY VERGE (SEE DETAILED LANDSCAPE PROPOSALS)
- TARMACADUM
- BLOCK PAVING

ENCLOSURE DETAILS:

- 1.8M HIGH BRICK WALL
- 1.8M HIGH TIMBER PANEL FENCING
- 1.2M ESTATE RAILING
- 0.45M ESTATE RAILING
- LOW LEVEL HEDGEROW (SEE DETAILED LANDSCAPE PROPOSALS)

LANDSCAPING:

- INDICATIVE TREE PLANTING (SEE DETAILED LANDSCAPE PROPOSALS)
- RETAINED VEGETATION (SEE TREE RETENTION PLAN)
- RETAINED TREE (CATEGORY A)
- ROOT PROTECTION ZONE
- ROOT PROTECTION ZONE - VETERAN

- TREE / VEGETATION REMOVED

OTHER:

- BIN COLLECTION POINT
- GATE/PERSONNEL DOOR
- STREET LIGHTING - COLUMN
- STREET LIGHTING - BOLLARD
- AFFORDABLE HOUSING (SEE AFFORDABLE HOUSING PLAN)
- PEDESTRIAN LINKS
- KEY IDENTIFIED VIEWS TO EXISTING MONUMENT FROM THE SITE
- EXISTING PUBLIC RIGHT OF WAY
- LAP
- LEAP
- SUB STATION LOCATION
- PROPOSED DRAINAGE (SEE DETAILED DRAINAGE PLAN)

SHOW HOMES:

- SHOW HOME
- SALES OFFICE

LAND NORTH OF BOREHAM ROAD, WARMINSTER

| Accommodation Schedule   |       |       |     |      |      |            |           |
|--------------------------|-------|-------|-----|------|------|------------|-----------|
| Housetype                | Sq.ft | Sq.m  | St. | Beds | No's | Total Sqft | Total Sqm |
| OPEN MARKET HOUSING      |       |       |     |      |      |            |           |
| 2B HOOPER                | 790   | 73.4  | 2   | 2    | 4    | 3,160      | 294       |
| COINER                   | 876   | 81.4  | 2   | 2    | 4    | 3,504      | 326       |
| BLEMMERE                 | 1,026 | 95.3  | 2   | 3    | 12   | 12,312     | 1,144     |
| 3B COPPER SMITH          | 1,026 | 95.3  | 2   | 3    | 12   | 12,312     | 1,144     |
| HILLARD                  | 1,052 | 97.7  | 2   | 3    | 6    | 6,312      | 586       |
| REEDMAKER                | 1,309 | 121.6 | 2   | 4    | 10   | 13,090     | 1,216     |
| 4B BOWYER                | 1,356 | 126.0 | 2   | 4    | 11   | 14,916     | 1,386     |
| LUTHIER                  | 1,392 | 129.3 | 2   | 4    | 9    | 12,528     | 1,164     |
| PHILOSOPHER              | 1,507 | 140.0 | 2   | 4    | 9    | 13,563     | 1,260     |
| 5B WATCHMAKER            | 1,901 | 176.6 | 2   | 5    | 4    | 7,604      | 706       |
| Sub Total (Open Market)  |       |       |     |      | 81   | 99,301     | 9,225     |
| AFFORDABLE               |       |       |     |      |      |            |           |
| 1B STATIONER             | 496   | 46.1  | 2   | 1    | 3    | 1,488      | 138       |
| BOOKBINDER               | 646   | 60.0  | 2   | 1    | 3    | 1,938      | 180       |
| 2B BAKER                 | 876   | 81.4  | 2   | 2    | 16   | 14,016     | 1,302     |
| 3B DRAFTSMAN             | 935   | 86.9  | 2   | 3    | 10   | 9,350      | 869       |
| TILLMAN                  | 1,026 | 95.3  | 2   | 3    | 20   | 20,520     | 1,906     |
| 4B CARTOGRAPHER          | 1,109 | 103.0 | 2   | 4    | 2    | 2,218      | 206       |
| Sub Total (Affordable)   |       |       |     |      | 54   | 49,530     | 4,601     |
| TOTAL                    |       |       |     |      | 135  | 148,831    | 13,827    |
| DENSITY dwelling/acre    |       |       |     |      | 15   | no./ac     |           |
| DENSITY dwelling/hectare |       |       |     |      | 36   | no./ac     |           |

LAND AT HOME FARM, WARMINSTER – SITE LAYOUT

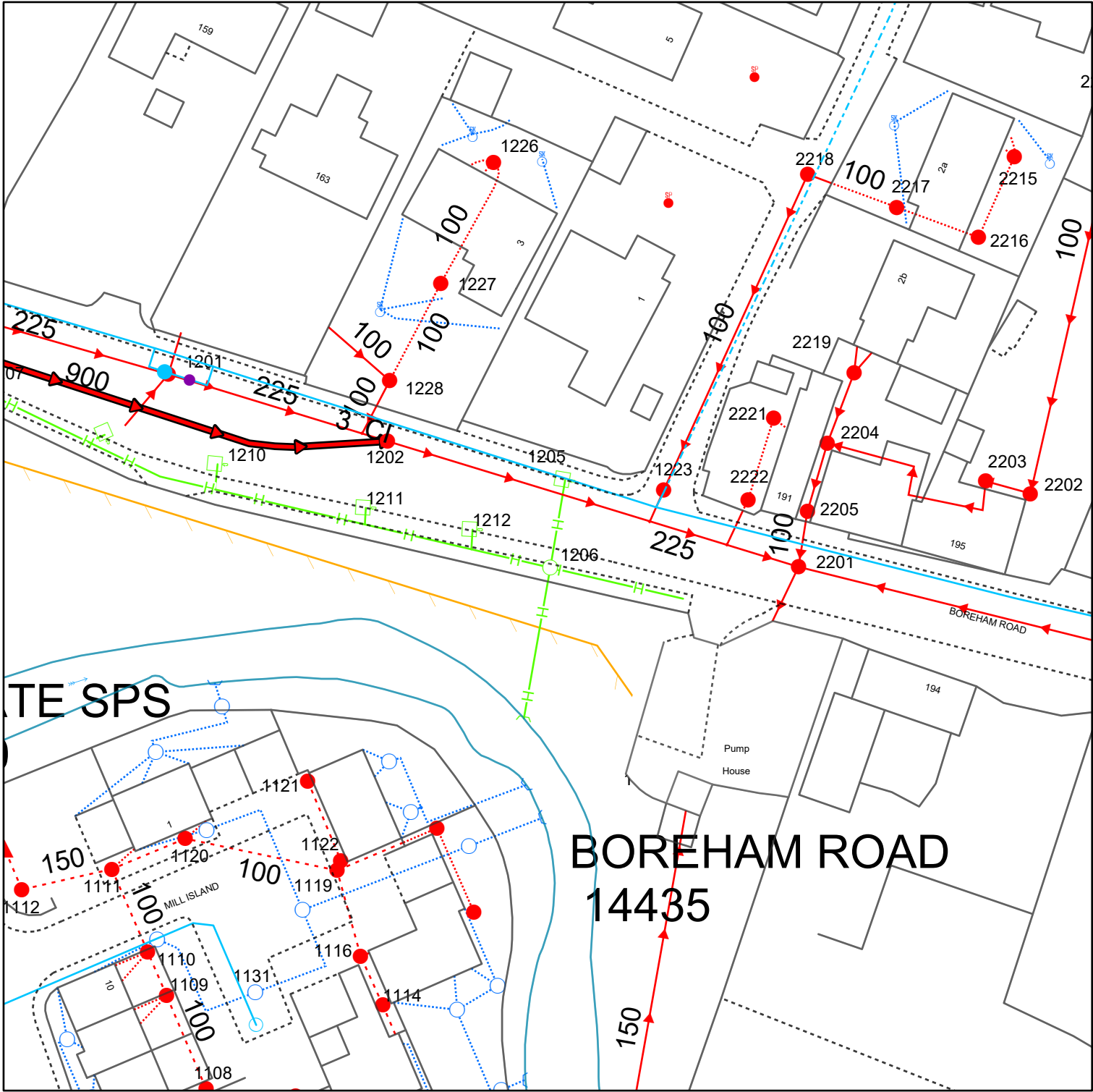




**Appendix C**  
**Wessex Water Asset Plans**



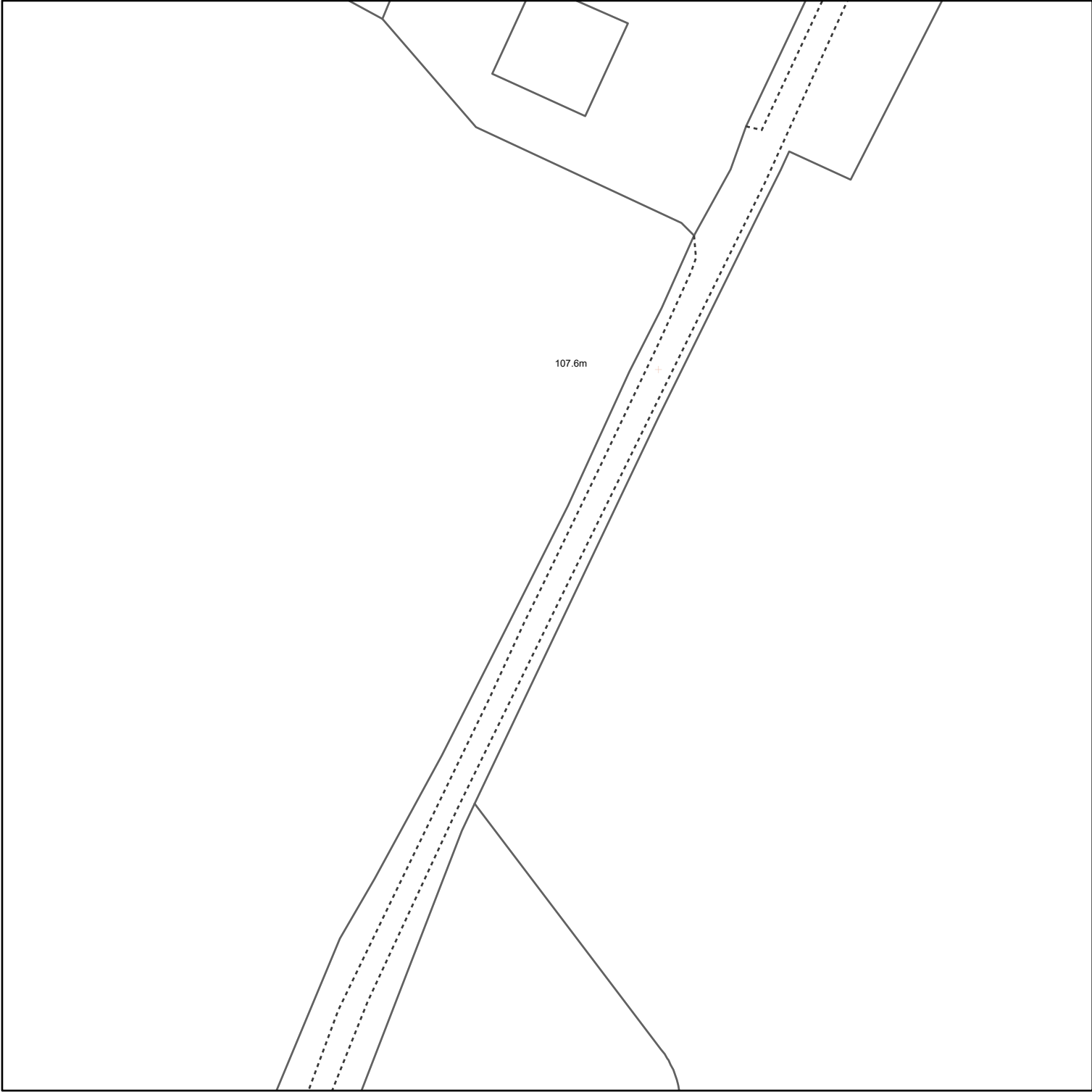
# Wessex Water Network Map



Reproduced from the Ordnance Survey map by permission on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright . Licence 100019539.

| WATER MAINS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SEWERS                                                                                                                                                                                                                                                                                      | STRATEGIC PUBLIC                                                                                                                                                                                                                                                                                                    | PRIVATE                                                                                                                                                                                                                                                                                                             | SECTION 104                                                                                                                                                                                                                                                                                                         | OTHER WESSEX PIPES                                                                                                                                              | NON-WESSEX / UNKNOWN                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>Distribution</li><li>Washout</li><li>Raw Water</li><li>Abandoned</li><li>Private</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"><li>Foul</li><li>Surface</li><li>Combined</li><li>Abandoned</li></ul>                                                                                                                                                                                     | <ul style="list-style-type: none"><li>Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).</li><li>Some styles of line and symbol are shown on the key in sample/typical colours.</li></ul> | <ul style="list-style-type: none"><li>Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).</li><li>Some styles of line and symbol are shown on the key in sample/typical colours.</li></ul> | <ul style="list-style-type: none"><li>Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).</li><li>Some styles of line and symbol are shown on the key in sample/typical colours.</li></ul> | <ul style="list-style-type: none"><li>Rising Mains</li><li>Standby Rising Mains</li><li>EDM</li><li>Effluent Disposal</li><li>Overflow</li><li>Syphon</li></ul> | <ul style="list-style-type: none"><li>Private Rising Mains</li><li>Culverted Watercourse</li><li>Highway Drain</li><li>Use Unknown</li><li>Status Unknown</li></ul> |
| FITTINGS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | STRUCTURES                                                                                                                                                                                                                                                                                  | STRUCTURES                                                                                                                                                                                                                                                                                                          | STRUCTURES                                                                                                                                                                                                                                                                                                          | STRUCTURES                                                                                                                                                                                                                                                                                                          | OTHER STRUCTURES                                                                                                                                                | OTHER STRUCTURES                                                                                                                                                    |
| <ul style="list-style-type: none"><li>Hydrant</li><li>Other</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"><li>Manhole - Foul</li><li>Manhole - Surface</li><li>Manhole - Combined</li><li>Inlet</li><li>Outfall</li><li>Lamphole</li><li>Bifurcation - Foul</li><li>Bifurcation - Surface</li><li>Bifurcation - Combined</li><li>Combined Sewage Overflow</li></ul> | <ul style="list-style-type: none"><li>Manhole - Foul</li><li>Manhole - Surface</li><li>Manhole - Combined</li><li>Inlet</li><li>Outfall</li><li>Lamphole</li><li>Bifurcation - Foul</li><li>Bifurcation - Surface</li><li>Bifurcation - Combined</li><li>Combined Sewage Overflow</li></ul>                         | <ul style="list-style-type: none"><li>Manhole - Foul</li><li>Manhole - Surface</li><li>Manhole - Combined</li><li>Inlet</li><li>Outfall</li><li>Lamphole</li><li>Bifurcation - Foul</li><li>Bifurcation - Surface</li><li>Bifurcation - Combined</li><li>Combined Sewage Overflow</li></ul>                         | <ul style="list-style-type: none"><li>Manhole - Foul</li><li>Manhole - Surface</li><li>Manhole - Combined</li><li>Inlet</li><li>Outfall</li><li>Lamphole</li><li>Bifurcation - Foul</li><li>Bifurcation - Surface</li><li>Bifurcation - Combined</li><li>Combined Sewage Overflow</li></ul>                         | <ul style="list-style-type: none"><li>Chamber</li><li>Tunnel</li><li>Interceptor</li></ul>                                                                      | <ul style="list-style-type: none"><li>Chamber</li><li>Tunnel</li><li>Interceptor</li></ul>                                                                          |
| <p>Information in this map is provided for identification purposes only. No warranty as to accuracy is given or implied. The precise route of pipe work may not exactly match that shown. Wessex Water does not accept liability for inaccuracies. Sewers and lateral drains adopted by Wessex Water under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011 are to be plotted over time and may not yet be shown. In carrying out any works, you accept liability for the cost of any repairs to Wessex Water apparatus damaged as a result of your works. You are advised to commence excavations using hand tools only. Mechanical digging equipment should not be used until pipe work has been precisely located. If you are considering any form of building works and pipe work is shown within the boundary of your property or a property to be purchased (or very close by) a surveyor should plot its exact position prior to commencing works or purchase. If you are proposing to build over or near Wessex Water's apparatus you should contact the Developer Services Team, tel: 01225 526333 or e-mail: developer.enquiries@wessexwater.co.uk to discuss your proposals. Details of assets within Wessex Water's land ownership are unavailable through this service.</p> |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                 |                                                                                                                                                                     |
| <p>Date: 16/01/2025<br/>Centre: 389184E, 144220N<br/>Scale: 1:625<br/>(when printed at A4 size)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                 |                                                                                                                                                                     |

# Wessex Water Network Map



Reproduced from the Ordnance Survey map by permission on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright . Licence 100019539.

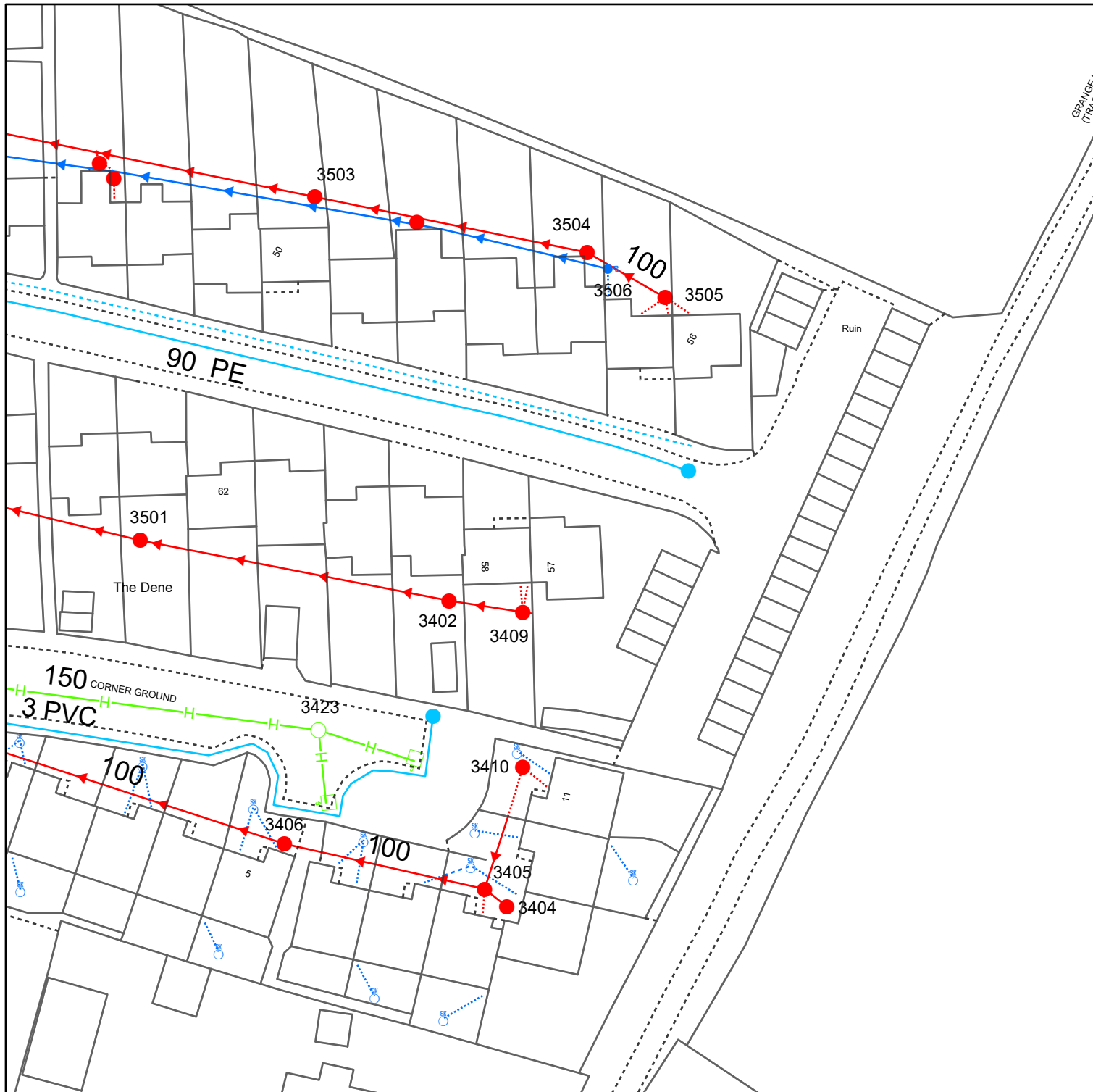
| WATER MAINS |              | SEWERS     |                          | STRATEGIC PUBLIC |                             | PRIVATE |  | SECTION 104 |  | OTHER WESSEX PIPES |                       | NON-WESSEX / UNKNOWN |                       |
|-------------|--------------|------------|--------------------------|------------------|-----------------------------|---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

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

**Wessex Water**  
YTL GROUP

**Date:** 16/01/2025  
**Centre:** 389538E, 144293N  
**Scale:** 1:625  
(when printed at A4 size)

# Wessex Water Network Map



Reproduced from the Ordnance Survey map by permission on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright . Licence 100019539.

| WATER MAINS                                                                                                                                                                  |              | SEWERS            |                          | STRATEGIC |                             | PUBLIC |  | PRIVATE |  | SECTION 104 |  | OTHER WESSEX PIPES |                      | NON-WESSEX / UNKNOWN |                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------|--------------------------|-----------|-----------------------------|--------|--|---------|--|-------------|--|--------------------|----------------------|----------------------|-----------------------|
|                                                                                                                                                                              | Distribution |                   | Foul                     |           |                             |        |  |         |  |             |  |                    | Rising Mains         |                      | Private Rising Mains  |
|                                                                                                                                                                              | Washout      |                   | Surface                  |           |                             |        |  |         |  |             |  |                    | Standby Rising Mains |                      | Culverted Watercourse |
|                                                                                                                                                                              | Raw Water    |                   | Combined                 |           |                             |        |  |         |  |             |  |                    | EDM                  |                      | Highway Drain         |
|                                                                                                                                                                              | Abandoned    |                   | Abandoned                |           |                             |        |  |         |  |             |  |                    | Overflow             |                      | Use Unknown           |
|                                                                                                                                                                              | Private      |                   |                          |           |                             |        |  |         |  |             |  |                    | Syphon               |                      | Status Unknown        |
| Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow). |              |                   |                          |           |                             |        |  |         |  |             |  |                    |                      |                      |                       |
| Some styles of line and symbol are shown on the key in sample/typical colours.                                                                                               |              |                   |                          |           |                             |        |  |         |  |             |  |                    |                      |                      |                       |
| <b>FITTINGS</b>                                                                                                                                                              |              | <b>STRUCTURES</b> |                          |           |                             |        |  |         |  |             |  |                    |                      |                      |                       |
|                                                                                                                                                                              | Hydrant      |                   | Manhole - Foul           |           | Pumping Station - Surface   |        |  |         |  |             |  |                    |                      |                      |                       |
|                                                                                                                                                                              | Other        |                   | Manhole - Surface        |           | Pumping Stn - Foul/Combined |        |  |         |  |             |  |                    |                      |                      |                       |
|                                                                                                                                                                              |              |                   | Manhole - Combined       |           | Gully                       |        |  |         |  |             |  |                    |                      |                      |                       |
|                                                                                                                                                                              |              |                   | Inlet                    |           | Vent Column                 |        |  |         |  |             |  |                    |                      |                      |                       |
|                                                                                                                                                                              |              |                   | Outfall                  |           | Rodding Eye                 |        |  |         |  |             |  |                    |                      |                      |                       |
|                                                                                                                                                                              |              |                   | Lamphole                 |           | Catchpit                    |        |  |         |  |             |  |                    |                      |                      |                       |
|                                                                                                                                                                              |              |                   | Bifurcation - Foul       |           | Flushing Chamber            |        |  |         |  |             |  |                    |                      |                      |                       |
|                                                                                                                                                                              |              |                   | Bifurcation - Surface    |           | Soakaway                    |        |  |         |  |             |  |                    |                      |                      |                       |
|                                                                                                                                                                              |              |                   | Bifurcation - Combined   |           | Non Return Valve            |        |  |         |  |             |  |                    |                      |                      |                       |
|                                                                                                                                                                              |              |                   | Combined Sewage Overflow |           | Air Valve                   |        |  |         |  |             |  |                    |                      |                      |                       |
|                                                                                                                                                                              |              |                   |                          |           | Hatch Box                   |        |  |         |  |             |  |                    |                      |                      |                       |
|                                                                                                                                                                              |              |                   |                          |           | Washout                     |        |  |         |  |             |  |                    |                      |                      |                       |
| <b>OTHER STRUCTURES</b> Attenuation Tank          Tunnel          Storage Tank          Interceptor                                                                          |              |                   |                          |           |                             |        |  |         |  |             |  |                    |                      |                      |                       |
|                                                                                                                                                                              |              |                   |                          |           |                             |        |  |         |  |             |  |                    |                      |                      |                       |

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

**OTHER STRUCTURES**

|                                                                                       |                  |                                                                                       |             |
|---------------------------------------------------------------------------------------|------------------|---------------------------------------------------------------------------------------|-------------|
|  | Attenuation Tank |  | Chamber     |
|  | Storage Tank     |  | Tunnel      |
|                                                                                       |                  |  | Interceptor |

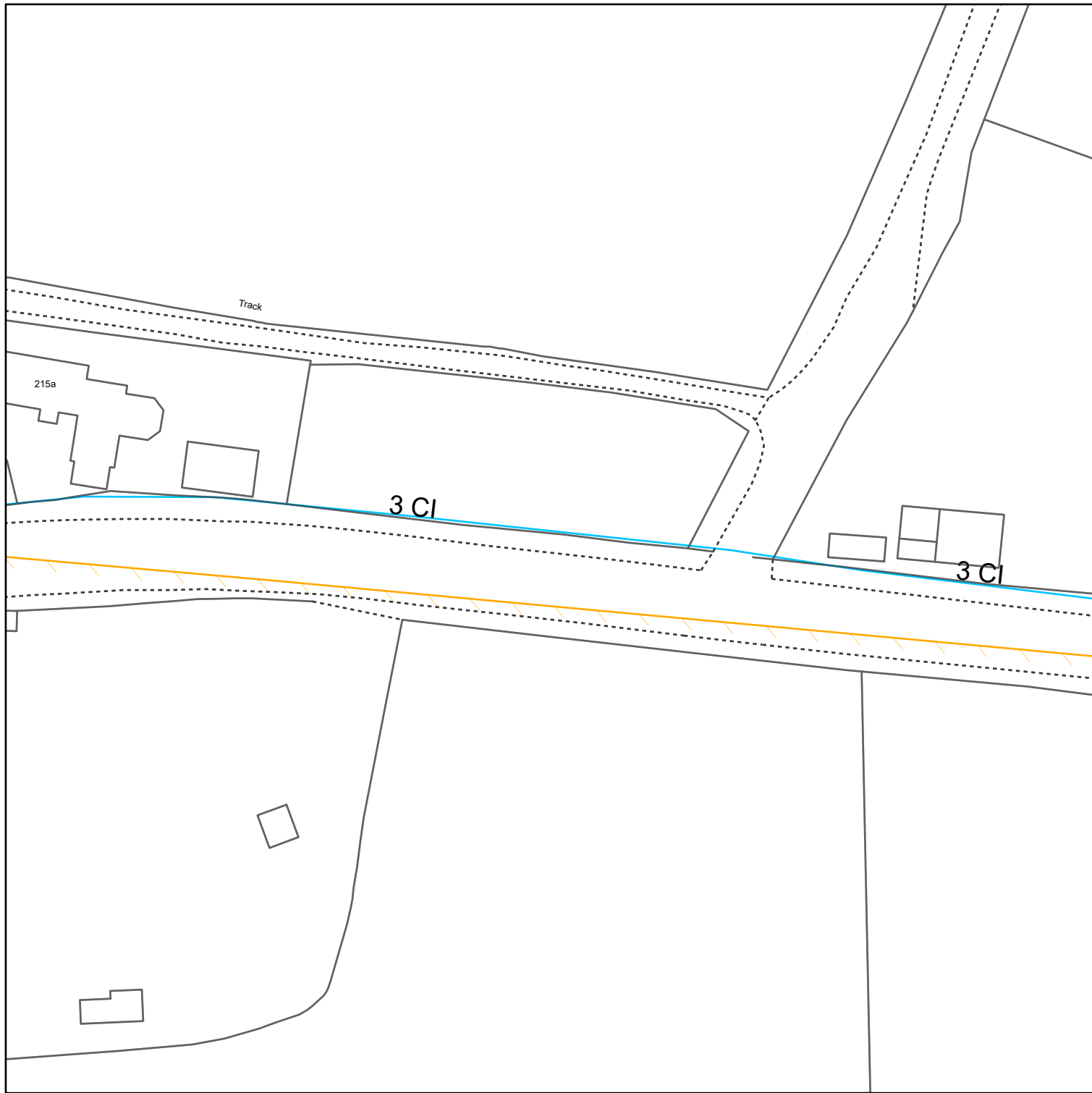
**Wessex Water**  
YTL GROUP



**Date:** 16/01/2025  
**Centre:** 389357E, 144500N  
**Scale:** 1:625  
(when printed at A4 size)



# Wessex Water Network Map

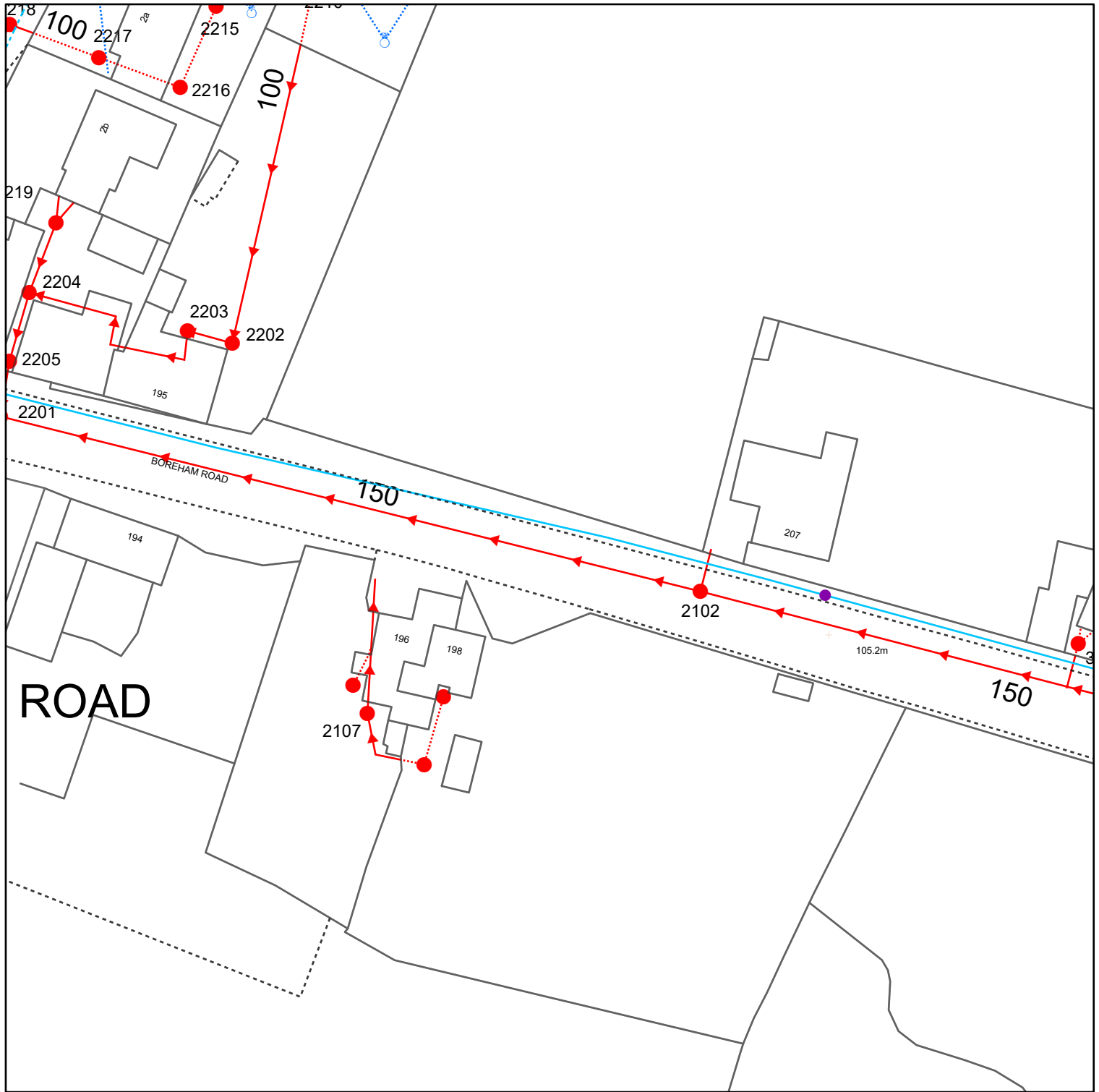


Reproduced from the Ordnance Survey map by permission on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright . Licence 100019539.

| WATER MAINS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              | SEWERS     |                          | STRATEGIC PUBLIC |                           | PRIVATE |                             | SECTION 104 |         | OTHER WESSEX PIPES        |                       | NON-WESSEX / UNKNOWN |                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|--------------------------|------------------|---------------------------|---------|-----------------------------|-------------|---------|---------------------------|-----------------------|----------------------|-----------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Distribution |            | Foul                     |                  |                           |         |                             |             |         |                           | Rising Mains          |                      | Private Rising Mains  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Washout      |            | Surface                  |                  |                           |         |                             |             |         |                           | Standby Rising Mains  |                      | Culverted Watercourse |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Raw Water    |            | Combined                 |                  |                           |         |                             |             |         |                           | EDM Effluent Disposal |                      | Highway Drain         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Abandoned    |            | Abandoned                |                  |                           |         |                             |             |         |                           | Overflow              |                      | Use Unknown           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Private      |            |                          |                  |                           |         |                             |             |         |                           | Syphon                |                      | Status Unknown        |
| Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |              |            |                          |                  |                           |         |                             |             |         |                           |                       |                      |                       |
| Some styles of line and symbol are shown on the key in sample/typical colours.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |              |            |                          |                  |                           |         |                             |             |         |                           |                       |                      |                       |
| FITTINGS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |              | STRUCTURES |                          |                  | Pumping Station - Surface |         | Pumping Stn - Foul/Combined |             |         |                           |                       |                      |                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Hydrant      |            | Manhole - Foul           |                  | Gully                     |         | Vent Column                 |             |         |                           |                       |                      |                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Other        |            | Manhole - Surface        |                  | Manhole - Combined        |         | Rodding Eye                 |             |         |                           |                       |                      |                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |            | Inlet                    |                  | Outfall                   |         | Catchpit                    |             |         |                           |                       |                      |                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |            | Lamphole                 |                  | Flushing Chamber          |         | Soakaway                    |             |         |                           |                       |                      |                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |            | Bifurcation - Foul       |                  | Bifurcation - Surface     |         | Non Return Valve            |             |         |                           |                       |                      |                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |            | Bifurcation - Combined   |                  | Air Valve                 |         | Hatch Box                   |             | Washout |                           |                       |                      |                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |            | Combined Sewage Overflow |                  |                           |         |                             |             |         |                           |                       |                      |                       |
| Information in this map is provided for identification purposes only. No warranty as to accuracy is given or implied. The precise route of pipe work may not exactly match that shown. Wessex Water does not accept liability for inaccuracies. Sewers and lateral drains adopted by Wessex Water under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011 are to be plotted over time and may not yet be shown. In carrying out any works, you accept liability for the cost of any repairs to Wessex Water apparatus damaged as a result of your works. You are advised to commence excavations using hand tools only. Mechanical digging equipment should not be used until pipe work has been precisely located. If you are considering any form of building works and pipe work is shown within the boundary of your property or a property to be purchased (or very close by) a surveyor should plot its exact position prior to commencing works or purchase. If you are proposing to build over or near Wessex Water's apparatus you should contact the Developer Services Team, tel: 01225 526333 or e-mail: <a href="mailto:developer.enquiries@wessexwater.co.uk">developer.enquiries@wessexwater.co.uk</a> to discuss your proposals. Details of assets within Wessex Water's land ownership are unavailable through this service. |              |            |                          |                  |                           |         |                             |             |         |                           |                       |                      |                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |            |                          |                  |                           |         |                             |             |         | OTHER STRUCTURES          |                       |                      | Chamber               |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |            |                          |                  |                           |         |                             |             |         |                           | Attenuation Tank      |                      | Tunnel                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |            |                          |                  |                           |         |                             |             |         |                           | Storage Tank          |                      | Interceptor           |
| <div><div></div><div></div></div> <div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |              |            |                          |                  |                           |         |                             |             |         |                           |                       |                      |                       |
| Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |              |            |                          |                  |                           |         |                             |             |         | 16/01/2025                |                       |                      |                       |
| Centre:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |              |            |                          |                  |                           |         |                             |             |         | 389466E, 144178N          |                       |                      |                       |
| Scale:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |              |            |                          |                  |                           |         |                             |             |         | 1:625                     |                       |                      |                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |            |                          |                  |                           |         |                             |             |         | (when printed at A4 size) |                       |                      |                       |



# Wessex Water Network Map

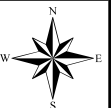


Reproduced from the Ordnance Survey map by permission on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright . Licence 100019539.

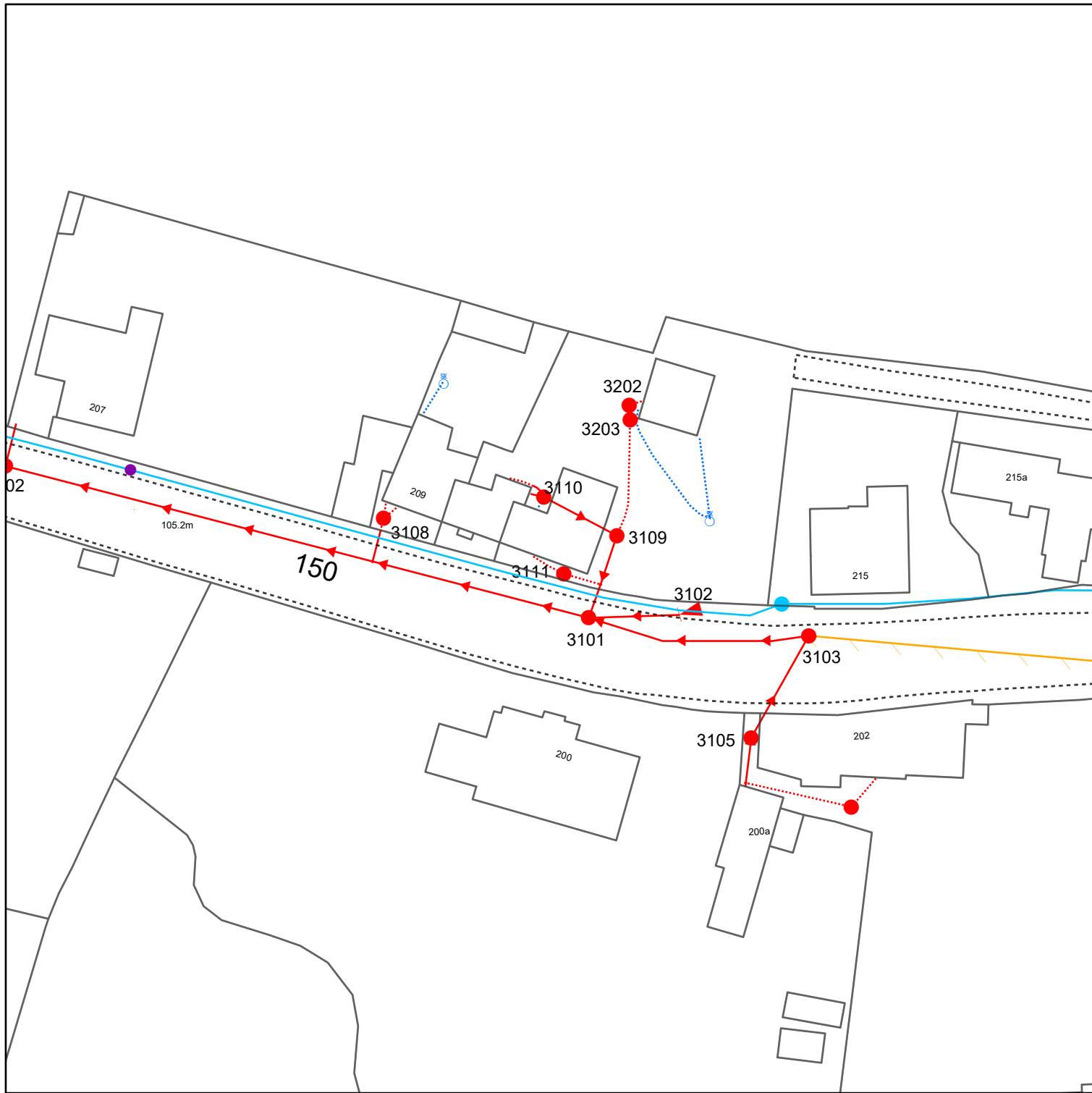
| WATER MAINS                                             |              | SEWERS                                                                                                                                                                       | STRATEGIC                | PUBLIC | PRIVATE                     | SECTION 104 | OTHER WESSEX PIPES |                       | NON-WESSEX / UNKNOWN |                       |
|---------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------|-----------------------------|-------------|--------------------|-----------------------|----------------------|-----------------------|
|                                                         | Distribution |                                                                                                                                                                              |                          |        |                             |             |                    | Rising Mains          |                      | Private Rising Mains  |
|                                                         | Washout      |                                                                                                                                                                              |                          |        |                             |             |                    | Standby Rising Mains  |                      | Culverted Watercourse |
|                                                         | Raw Water    |                                                                                                                                                                              |                          |        |                             |             |                    | EDM Effluent Disposal |                      | Highway Drain         |
|                                                         | Abandoned    |                                                                                                                                                                              |                          |        |                             |             |                    | Overflow              |                      | Use Unknown           |
|                                                         | Private      |                                                                                                                                                                              |                          |        |                             |             |                    | Syphon                |                      | Status Unknown        |
|                                                         |              | Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow). |                          |        |                             |             |                    |                       |                      |                       |
|                                                         |              | Some styles of line and symbol are shown on the key in sample/typical colours.                                                                                               |                          |        |                             |             |                    |                       |                      |                       |
| FITTINGS                                                |              | STRUCTURES                                                                                                                                                                   |                          |        |                             |             |                    |                       |                      |                       |
|                                                         | Hydrant      |                                                                                                                                                                              | Manhole - Foul           |        | Pumping Station - Surface   |             |                    |                       |                      |                       |
|                                                         | Other        |                                                                                                                                                                              | Manhole - Surface        |        | Pumping Stn - Foul/Combined |             |                    |                       |                      |                       |
|                                                         |              |                                                                                                                                                                              | Manhole - Combined       |        | Gully                       |             |                    |                       |                      |                       |
|                                                         |              |                                                                                                                                                                              | Inlet                    |        | Vent Column                 |             |                    |                       |                      |                       |
|                                                         |              |                                                                                                                                                                              | Outfall                  |        | Rodding Eye                 |             |                    |                       |                      |                       |
|                                                         |              |                                                                                                                                                                              | Lamphole                 |        | Catchpit                    |             |                    |                       |                      |                       |
|                                                         |              |                                                                                                                                                                              | Bifurcation - Foul       |        | Flushing Chamber            |             |                    |                       |                      |                       |
|                                                         |              |                                                                                                                                                                              | Bifurcation - Surface    |        | Soakaway                    |             |                    |                       |                      |                       |
|                                                         |              |                                                                                                                                                                              | Bifurcation - Combined   |        | Non Return Valve            |             |                    |                       |                      |                       |
|                                                         |              |                                                                                                                                                                              | Combined Sewage Overflow |        | Air Valve                   |             |                    |                       |                      |                       |
|                                                         |              |                                                                                                                                                                              |                          |        | Hatch Box                   |             |                    |                       |                      |                       |
|                                                         |              |                                                                                                                                                                              |                          |        | Washout                     |             |                    |                       |                      |                       |
|                                                         |              |                                                                                                                                                                              |                          |        |                             |             | OTHER STRUCTURES   |                       |                      | Chamber               |
|                                                         |              |                                                                                                                                                                              |                          |        |                             |             |                    | Attenuation Tank      |                      | Tunnel                |
|                                                         |              |                                                                                                                                                                              |                          |        |                             |             |                    | Storage Tank          |                      | Interceptor           |
| <div><div><div></div><div></div></div><div></div></div> |              |                                                                                                                                                                              |                          |        |                             |             |                    |                       |                      |                       |

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

**Date:** 16/01/2025  
**Centre:** 389276E, 144203N  
**Scale:** 1:625  
(when printed at A4 size)



# Wessex Water Network Map



Reproduced from the Ordnance Survey map by permission on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright . Licence 100019539.

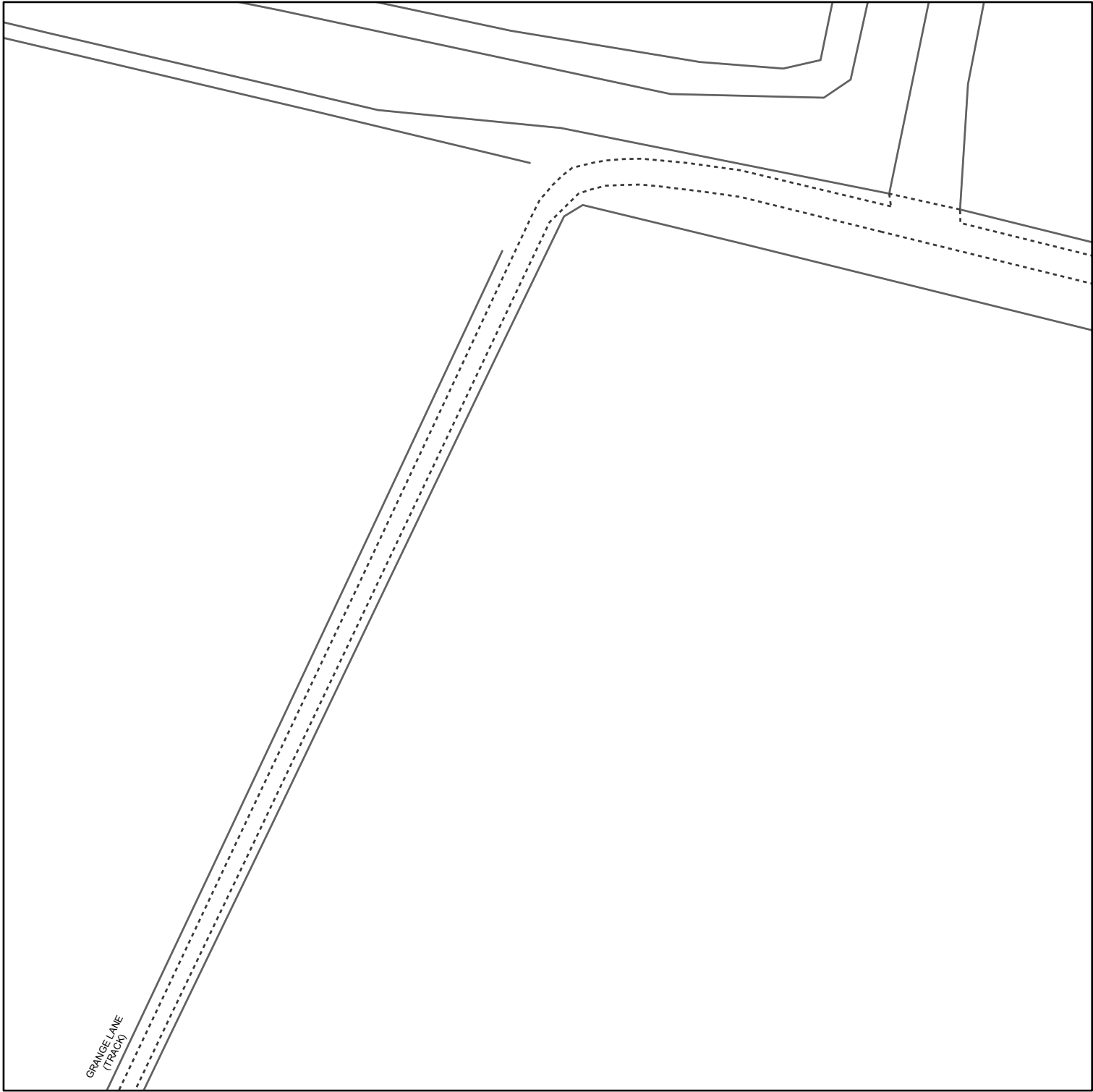
| WATER MAINS     |              | SEWERS                                                                                                                                                                                                                                                         |                          | STRATEGIC |                | PUBLIC |                           | PRIVATE |                             | SECTION 104 |           | OTHER WESSEX PIPES |                      | NON-WESSEX / UNKNOWN |                       |
|-----------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------|----------------|--------|---------------------------|---------|-----------------------------|-------------|-----------|--------------------|----------------------|----------------------|-----------------------|
|                 | Distribution |                                                                                                                                                                                                                                                                | Foul                     |           |                |        |                           |         |                             |             |           |                    | Rising Mains         |                      | Private Rising Mains  |
|                 | Washout      |                                                                                                                                                                                                                                                                | Surface                  |           |                |        |                           |         |                             |             |           |                    | Standby Rising Mains |                      | Culverted Watercourse |
|                 | Raw Water    |                                                                                                                                                                                                                                                                | Combined                 |           |                |        |                           |         |                             |             |           |                    | EDM                  |                      | Highway Drain         |
|                 | Abandoned    |                                                                                                                                                                                                                                                                | Abandoned                |           |                |        |                           |         |                             |             |           |                    | Overflow             |                      | Use Unknown           |
|                 | Private      |                                                                                                                                                                                                                                                                |                          |           |                |        |                           |         |                             |             |           |                    | Syphon               |                      | Status Unknown        |
| <b>FITTINGS</b> |              | Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).<br>Some styles of line and symbol are shown on the key in sample/typical colours. |                          |           |                |        |                           |         |                             |             |           |                    |                      |                      |                       |
|                 | Hydrant      | <b>STRUCTURES</b>                                                                                                                                                                                                                                              |                          |           | Manhole - Foul |        | Pumping Station - Surface |         | Pumping Stn - Foul/Combined |             |           |                    |                      |                      |                       |
|                 | Other        |                                                                                                                                                                                                                                                                | Manhole - Surface        |           | Gully          |        | Vent Column               |         | Rodding Eye                 |             |           |                    |                      |                      |                       |
|                 |              |                                                                                                                                                                                                                                                                | Manhole - Combined       |           | Catchpit       |        | Flushing Chamber          |         | Soakaway                    |             |           |                    |                      |                      |                       |
|                 |              |                                                                                                                                                                                                                                                                | Inlet                    |           | Outfall        |        | Non Return Valve          |         | Air Valve                   |             | Hatch Box |                    | Washout              |                      |                       |
|                 |              |                                                                                                                                                                                                                                                                | Lamphole                 |           |                |        |                           |         |                             |             |           |                    |                      |                      |                       |
|                 |              |                                                                                                                                                                                                                                                                | Bifurcation - Foul       |           |                |        |                           |         |                             |             |           |                    |                      |                      |                       |
|                 |              |                                                                                                                                                                                                                                                                | Bifurcation - Surface    |           |                |        |                           |         |                             |             |           |                    |                      |                      |                       |
|                 |              |                                                                                                                                                                                                                                                                | Bifurcation - Combined   |           |                |        |                           |         |                             |             |           |                    |                      |                      |                       |
|                 |              |                                                                                                                                                                                                                                                                | Combined Sewage Overflow |           |                |        |                           |         |                             |             |           |                    |                      |                      |                       |
|                 |              | <div>OTHER STRUCTURES</div> <div>  Attenuation Tank            Tunnel         </div> <div>  Storage Tank            Interceptor         </div>                                                                                                                 |                          |           |                |        |                           |         |                             |             |           |                    |                      |                      |                       |
| <div> </div>    |              |                                                                                                                                                                                                                                                                |                          |           |                |        |                           |         |                             |             |           |                    |                      |                      |                       |

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

**Date:** 16/01/2025  
**Centre:** 389355E, 144189N  
**Scale:** 1:625  
(when printed at A4 size)



# Wessex Water Network Map



Reproduced from the Ordnance Survey map with the permission of the Controller of His Majesty's Stationery Office. © Crown copyright and database rights (2025) OS AC0000848304

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

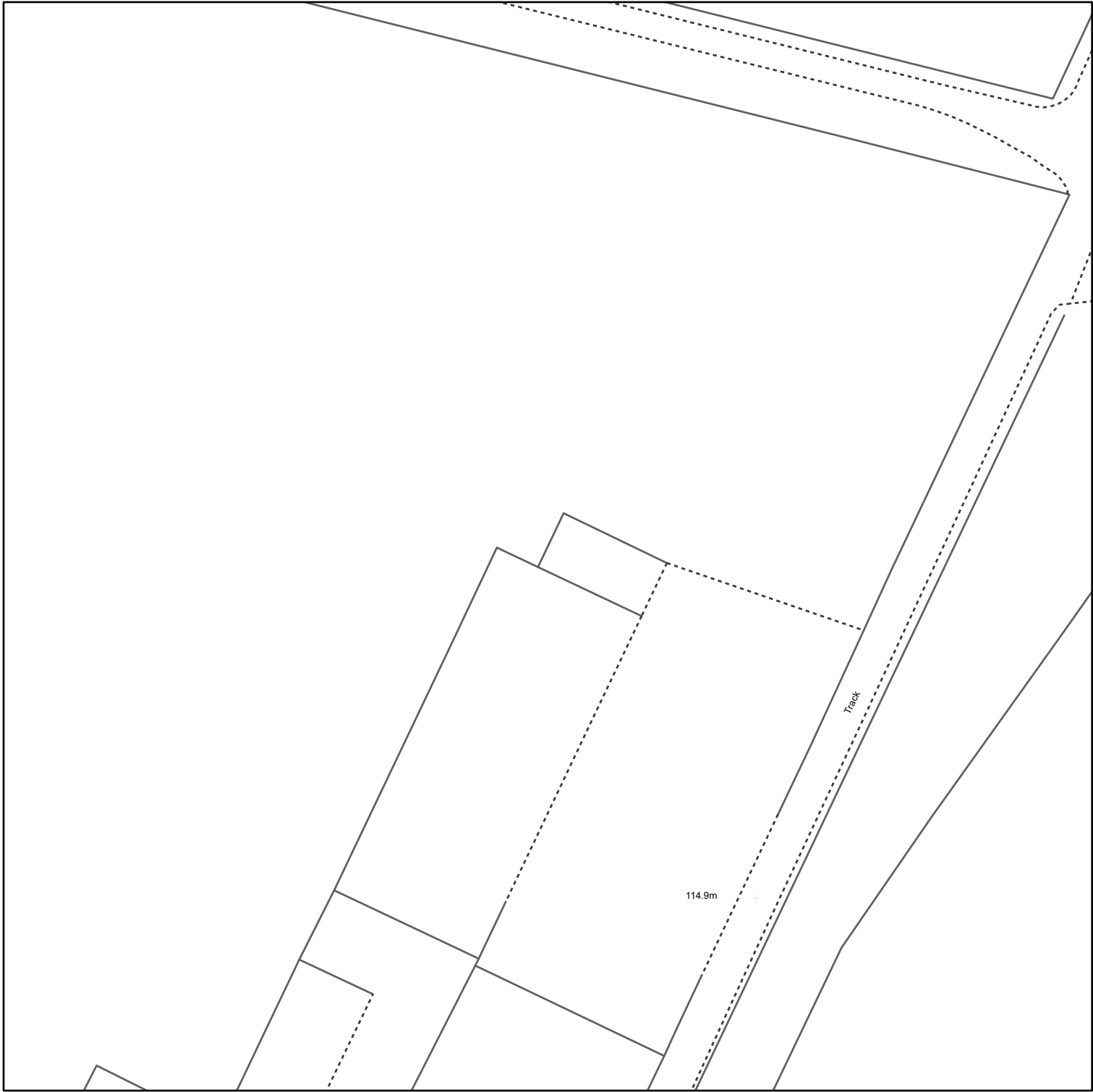
Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow). Some styles of line and symbol are shown on the key in sample/typical colours.

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

**Wessex Water**  
YTL GROUP

**Date:** 03/10/2025  
**Centre:** 389478E, 144626N  
**Scale:** 1:625  
(when printed at A4 size)

# Wessex Water Network Map



Reproduced from the Ordnance Survey map with the permission of the Controller of His Majesty's Stationery Office. © Crown copyright and database rights (2025) OS AC0000848304

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

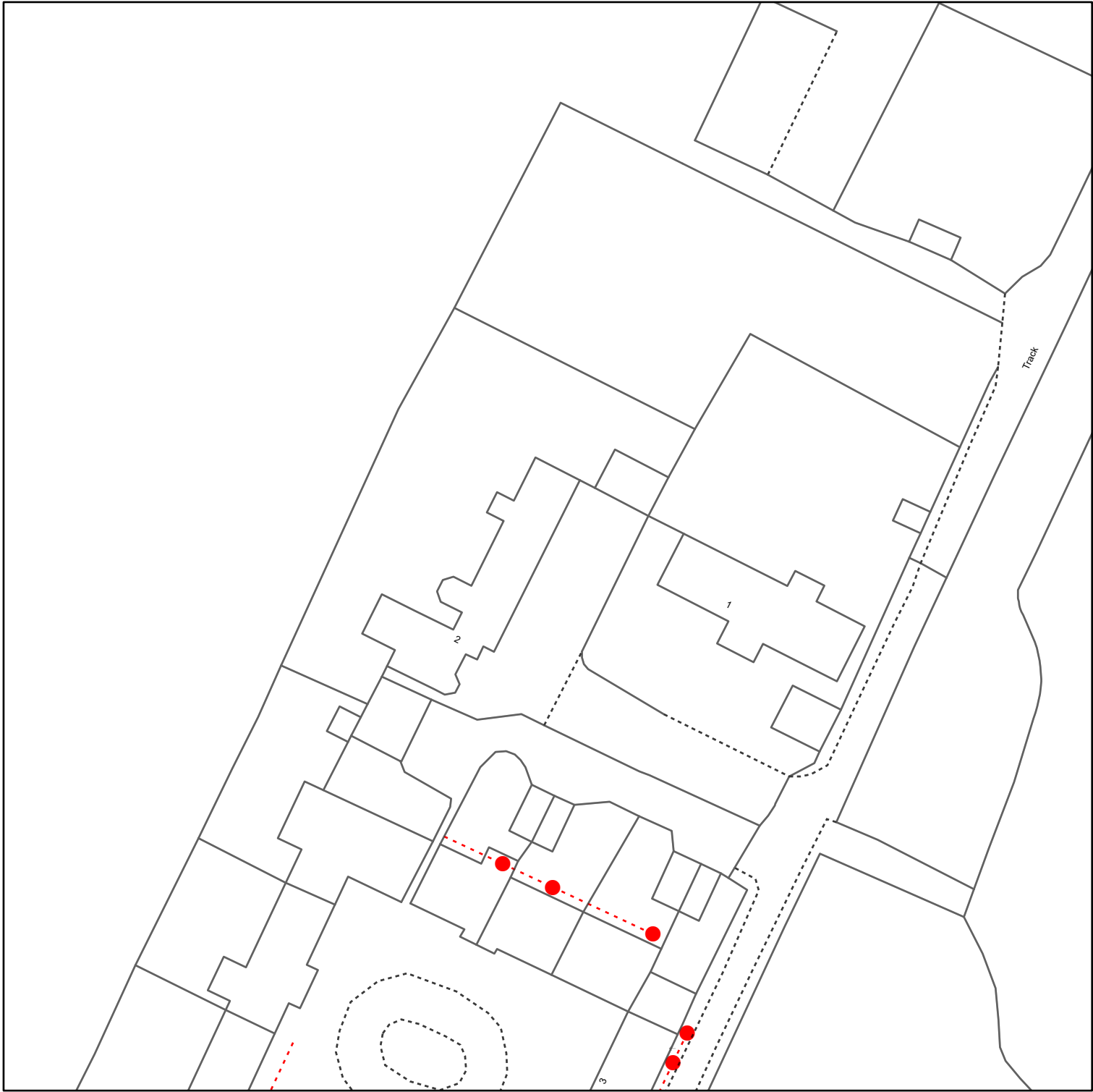
Information in this map is provided for identification purposes only. No warranty as to accuracy is given or implied. The precise route of pipe work may not exactly match that shown. Wessex Water does not accept liability for inaccuracies. Sewers and lateral drains adopted by Wessex Water under the Water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

**Wessex Water**  
YTL GROUP

**Date:** 03/10/2025  
**Centre:** 389630E, 144573N  
**Scale:** 1:625  
(when printed at A4 size)



# Wessex Water Network Map



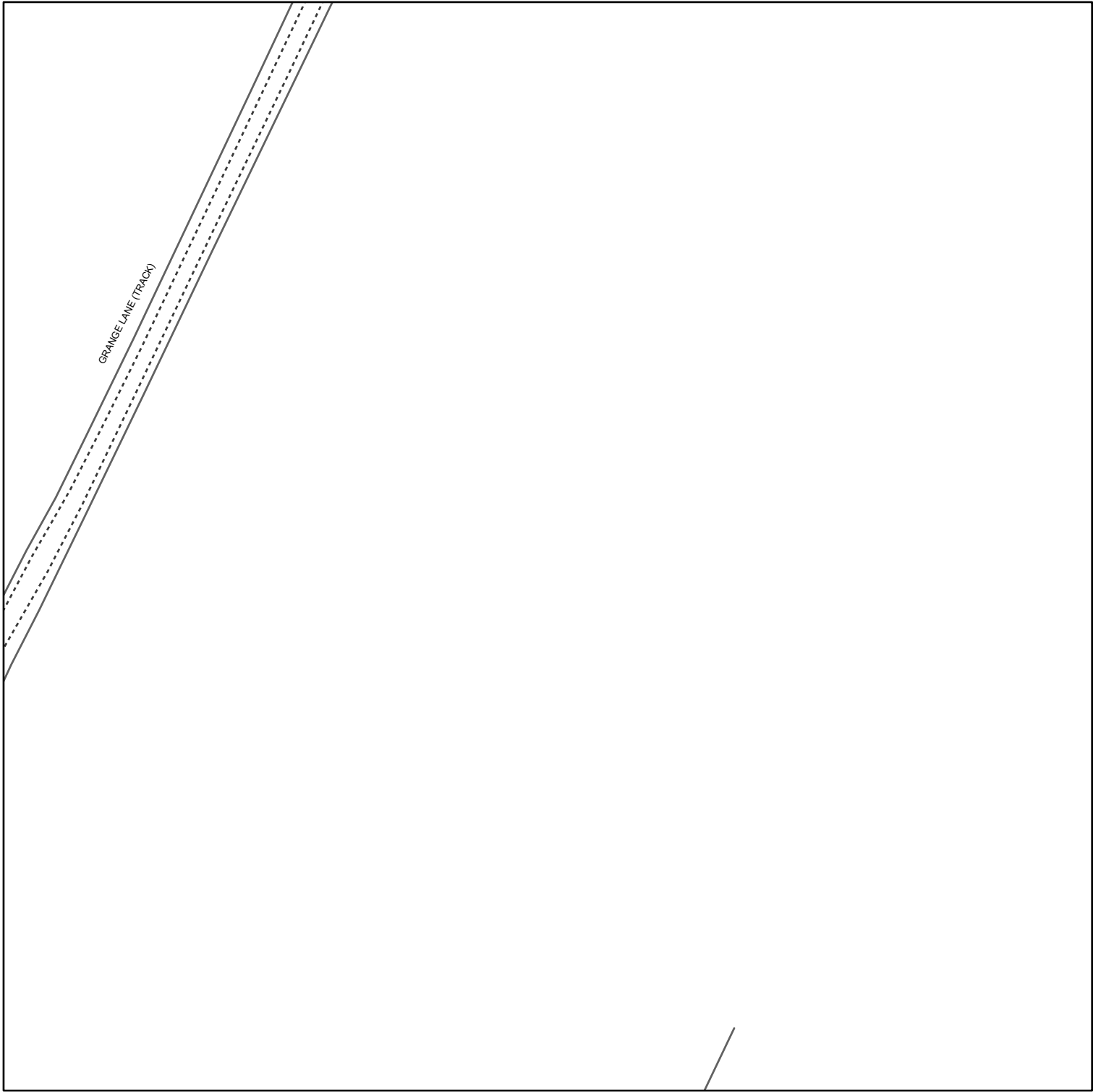
Reproduced from the Ordnance Survey map with the permission of the Controller of His Majesty's Stationery Office. © Crown copyright and database rights (2025) OS AC0000848304

| WATER MAINS                                                                                                                      | SEWERS                                                                                                                                                                                                                                                                                                        | STRATEGIC PUBLIC                                                                                                                                                                                                                                                                                            | PRIVATE                                                                                                                                                | SECTION 104                                                                                                                                                                        | OTHER WESSEX PIPES                                                                                                                                      | NON-WESSEX / UNKNOWN                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>Distribution</li><li>Washout</li><li>Raw Water</li><li>Abandoned</li><li>Private</li></ul> | <ul style="list-style-type: none"><li>Foul</li><li>Surface</li><li>Combined</li><li>Abandoned</li></ul>                                                                                                                                                                                                       | <ul style="list-style-type: none"><li>Red line with arrow</li><li>Blue line with arrow</li><li>Green line with arrow</li><li>Red line with X</li></ul>                                                                                                                                                      | <ul style="list-style-type: none"><li>Red line with arrow</li><li>Blue line with arrow</li><li>Green line with arrow</li><li>Red line with X</li></ul> | <ul style="list-style-type: none"><li>Red dashed line with arrow</li><li>Blue dashed line with arrow</li><li>Green dashed line with arrow</li><li>Red dashed line with X</li></ul> | <ul style="list-style-type: none"><li>Rising Mains</li><li>Standby Rising Mains</li><li>EDM Effluent Disposal</li><li>Overflow</li><li>Syphon</li></ul> | <ul style="list-style-type: none"><li>Private Rising Mains</li><li>Culverted Watercourse</li><li>Highway Drain</li><li>Use Unknown</li><li>Status Unknown</li></ul> |
| <b>FITTINGS</b> <ul style="list-style-type: none"><li>Hydrant</li><li>Other</li></ul>                                            | <b>STRUCTURES</b> <ul style="list-style-type: none"><li>Manhole - Foul</li><li>Manhole - Surface</li><li>Manhole - Combined</li><li>Inlet</li><li>Outfall</li><li>Lamphole</li><li>Bifurcation - Foul</li><li>Bifurcation - Surface</li><li>Bifurcation - Combined</li><li>Combined Sewage Overflow</li></ul> | <ul style="list-style-type: none"><li>Pumping Station - Surface</li><li>Pumping Stn - Foul/Combined</li><li>Gully</li><li>Vent Column</li><li>Rodding Eye</li><li>Catchpit</li><li>Flushing Chamber</li><li>Soakaway</li><li>Non Return Valve</li><li>Air Valve</li><li>Hatch Box</li><li>Washout</li></ul> |                                                                                                                                                        |                                                                                                                                                                                    |                                                                                                                                                         | <b>OTHER STRUCTURES</b> <ul style="list-style-type: none"><li>Chamber</li><li>Tunnel</li><li>Interceptor</li></ul>                                                  |

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

**Date:** 03/10/2025  
**Centre:** 389577E, 144463N  
**Scale:** 1:625  
(when printed at A4 size)

# Wessex Water Network Map



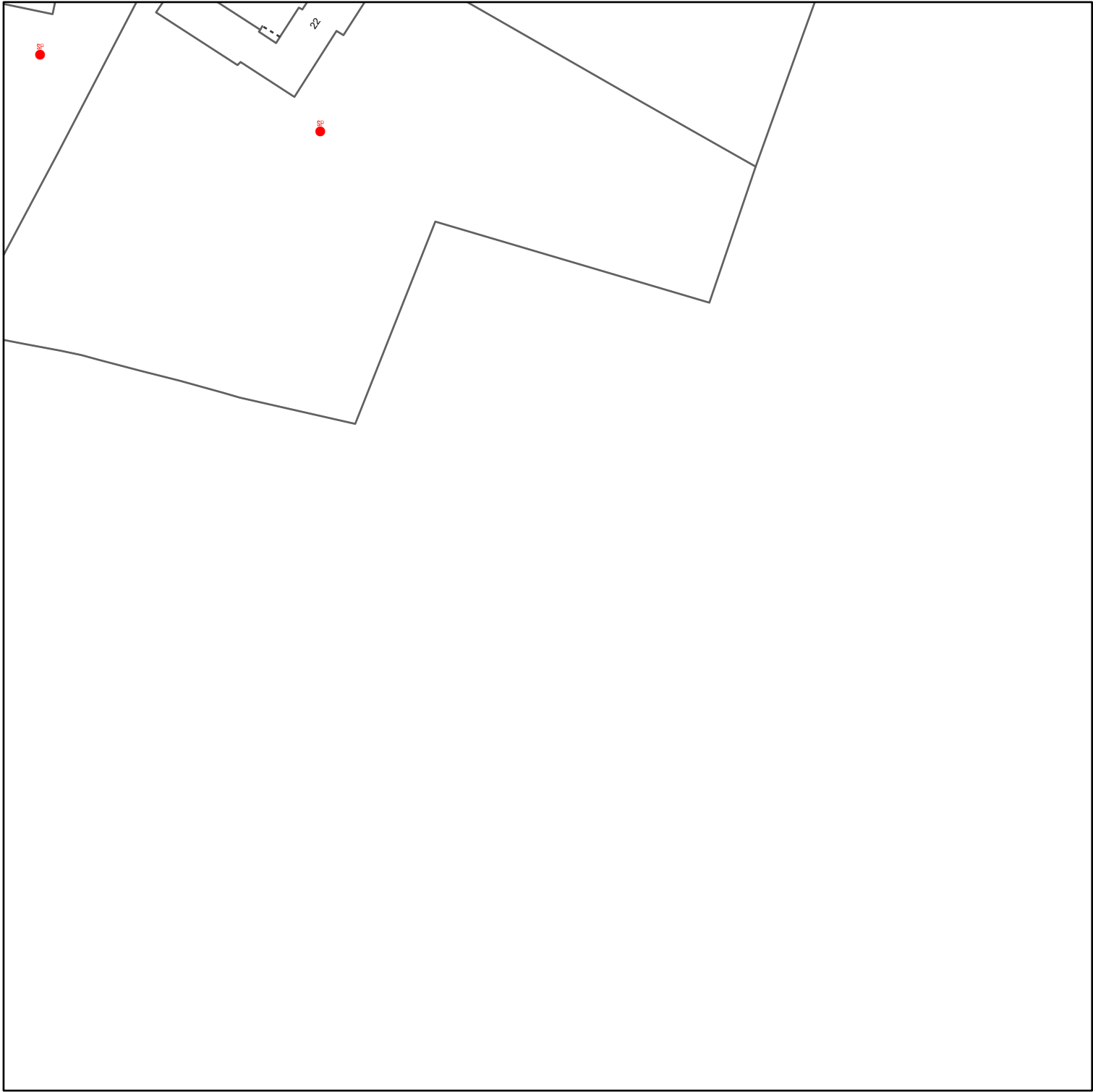
Reproduced from the Ordnance Survey map with the permission of the Controller of His Majesty's Stationery Office. © Crown copyright and database rights (2025) OS AC0000848304

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

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

**Date:** 03/10/2025  
**Centre:** 389473E, 144536N  
**Scale:** 1:625  
(when printed at A4 size)

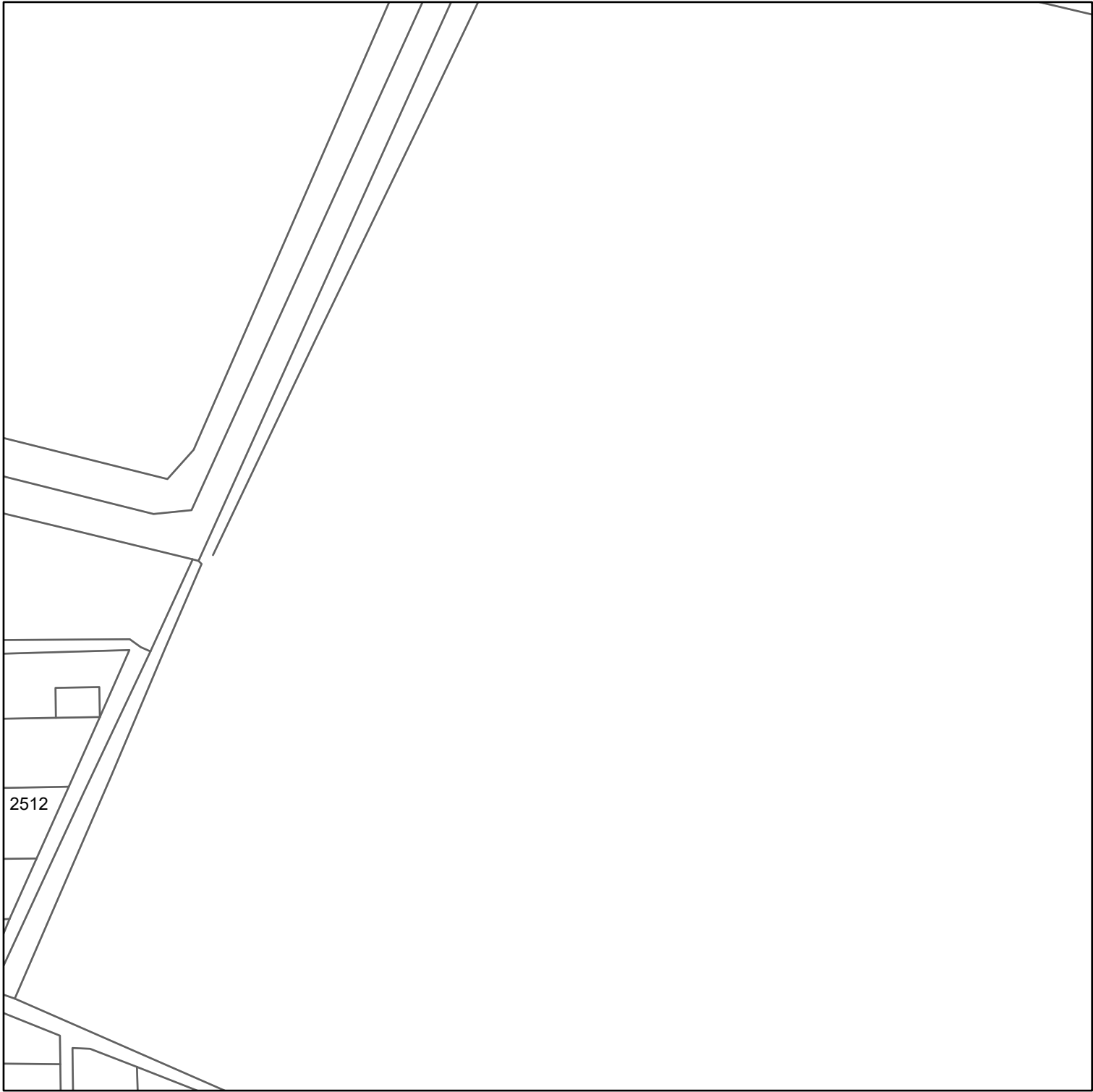
# Wessex Water Network Map



Reproduced from the Ordnance Survey map with the permission of the Controller of His Majesty's Stationery Office. © Crown copyright and database rights (2025) OS AC0000848304

| WATER MAINS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |           | SEWERS         |                    | STRATEGIC PUBLIC          |                             | PRIVATE                  |             | SECTION 104 |          | OTHER WESSEX PIPES                                                                                                       |                      | NON-WESSEX / UNKNOWN  |                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------|--------------------|---------------------------|-----------------------------|--------------------------|-------------|-------------|----------|--------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------------|----------------------|
| Distribution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Washout   | Foul           | Surface            | Foul                      | Surface                     | Foul                     | Surface     | Foul        | Surface  | Rising Mains                                                                                                             | Standby Rising Mains | Culverted Watercourse | Private Rising Mains |
| Raw Water                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Abandoned | Combined       | Abandoned          | Foul                      | Surface                     | Foul                     | Surface     | Foul        | Surface  | EDM Effluent Disposal                                                                                                    | Overflow             | Highway Drain         | Use Unknown          |
| Private                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |           |                |                    |                           |                             |                          |             |             |          | Syphon                                                                                                                   |                      | Status Unknown        |                      |
| FITTINGS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |           | STRUCTURES     |                    |                           |                             |                          |             |             |          |                                                                                                                          |                      | OTHER STRUCTURES      |                      |
| Hydrant                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Other     | Manhole - Foul | Manhole - Surface  | Pumping Station - Surface | Pumping Stn - Foul/Combined | Gully                    | Vent Column | Rodding Eye | Catchpit | Flushing Chamber                                                                                                         | Soakaway             | Non Return Valve      | Air Valve            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | Inlet          | Outfall            | Hatch Box                 | Washout                     |                          |             |             |          |                                                                                                                          |                      |                       |                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           | Lamphole       | Bifurcation - Foul | Bifurcation - Surface     | Bifurcation - Combined      | Combined Sewage Overflow |             |             |          |                                                                                                                          |                      |                       |                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |                |                    |                           |                             |                          |             |             |          |                                                                                                                          |                      |                       |                      |
| <p>Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).<br/>Some styles of line and symbol are shown on the key in sample/typical colours.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |           |                |                    |                           |                             |                          |             |             |          |                                                                                                                          |                      |                       |                      |
| <p>Information in this map is provided for identification purposes only. No warranty as to accuracy is given or implied. The precise route of pipe work may not exactly match that shown.<br/>Wessex Water does not accept liability for inaccuracies. Sewers and lateral drains adopted by Wessex Water under the Water Industry (Schemes for Adoption of Private Sewers) Regulations 2011 are to be plotted over time and may not yet be shown. In carrying out any works, you accept liability for the cost of any repairs to Wessex Water apparatus damaged as a result of your works. You are advised to commence excavations using hand tools only. Mechanical digging equipment should not be used until pipe work has been precisely located. If you are considering any form of building works and pipe work is shown within the boundary of your property or a property to be purchased (or very close by) a surveyor should plot its exact position prior to commencing works or purchase. If you are proposing to build over or near Wessex Water's apparatus you should contact the Developer Services Team, tel: 01225 526333 or e-mail: developer.enquiries@wessexwater.co.uk to discuss your proposals. Details of assets within Wessex Water's land ownership are unavailable through this service.</p> |           |                |                    |                           |                             |                          |             |             |          |                                                                                                                          |                      |                       |                      |
| <p><b>Wessex Water</b><br/>YTL GROUP</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |           |                |                    |                           |                             |                          |             |             |          | <p><b>Date:</b> 03/10/2025<br/><b>Centre:</b> 389415E, 144302N<br/><b>Scale:</b> 1:625<br/>(when printed at A4 size)</p> |                      |                       |                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |           |                |                    |                           |                             |                          |             |             |          |                                                                                                                          |                      |                       |                      |

# Wessex Water Network Map



Reproduced from the Ordnance Survey map with the permission of the Controller of His Majesty's Stationery Office. © Crown copyright and database rights (2025) OS AC0000848304

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

**OTHER STRUCTURES**

|                  |             |
|------------------|-------------|
| Attenuation Tank | Chamber     |
| Storage Tank     | Tunnel      |
|                  | Interceptor |

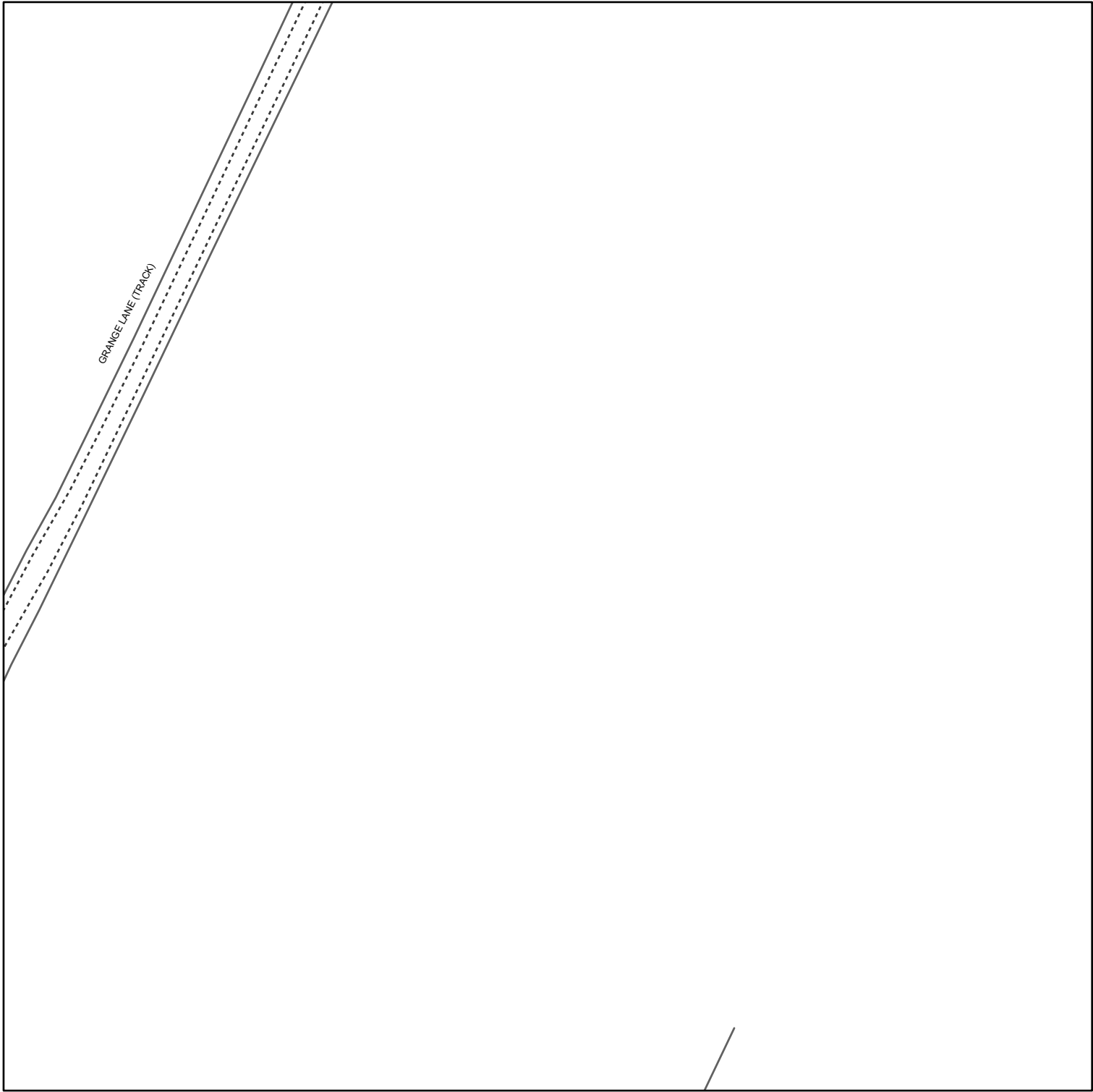
**Wessex Water**  
YTL GROUP

**Date:** 03/10/2025  
**Centre:** 389355E, 144623N  
**Scale:** 1:625  
(when printed at A4 size)

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



# Wessex Water Network Map



Reproduced from the Ordnance Survey map with the permission of the Controller of His Majesty's Stationery Office. © Crown copyright and database rights (2025) OS AC0000848304

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

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

**Date:** 03/10/2025  
**Centre:** 389473E, 144536N  
**Scale:** 1:625  
(when printed at A4 size)

**Wessex Water**  
YTL GROUP

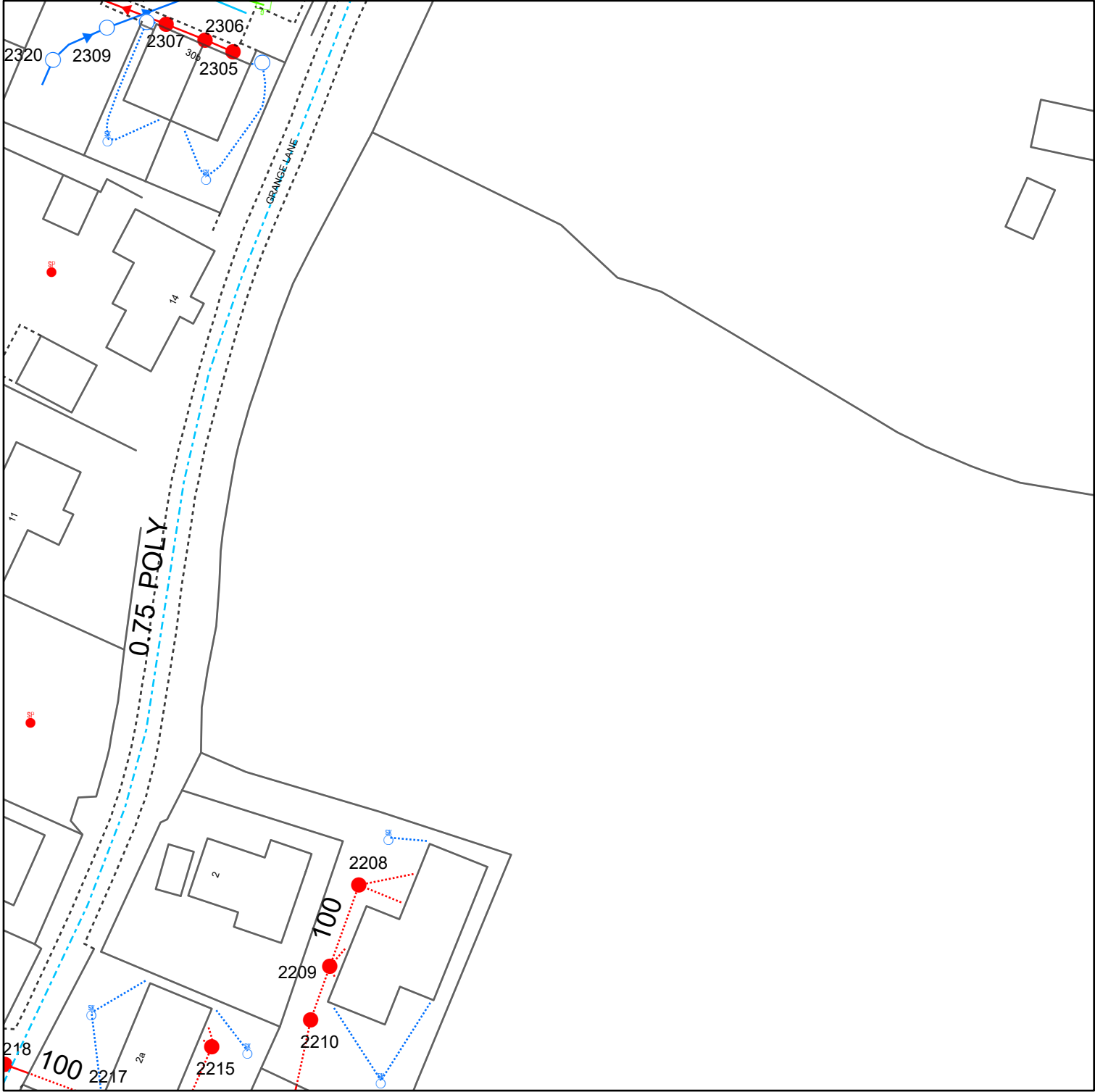
# Wessex Water Network Map



Reproduced from the Ordnance Survey map with the permission of the Controller of His Majesty's Stationery Office. © Crown copyright and database rights (2025) OS AC0000848304

| WATER MAINS                                                                                                                                                                  |              | SEWERS     |                          | STRATEGIC |                           | PUBLIC |                             | PRIVATE |                          | SECTION 104 |                  | OTHER WESSEX PIPES |                       | NON-WESSEX / UNKNOWN |                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------|--------------------------|-----------|---------------------------|--------|-----------------------------|---------|--------------------------|-------------|------------------|--------------------|-----------------------|----------------------|-----------------------|
|                                                                                                                                                                              | Distribution |            | Foul                     |           |                           |        |                             |         |                          |             |                  |                    | Rising Mains          |                      | Private Rising Mains  |
|                                                                                                                                                                              | Washout      |            | Surface                  |           |                           |        |                             |         |                          |             |                  |                    | Standby Rising Mains  |                      | Culverted Watercourse |
|                                                                                                                                                                              | Raw Water    |            | Combined                 |           |                           |        |                             |         |                          |             |                  |                    | EDM Effluent Disposal |                      | Highway Drain         |
|                                                                                                                                                                              | Abandoned    |            | Abandoned                |           |                           |        |                             |         |                          |             |                  |                    | Overflow              |                      | Use Unknown           |
|                                                                                                                                                                              | Private      |            |                          |           |                           |        |                             |         |                          |             |                  |                    | Syphon                |                      | Status Unknown        |
| Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow). |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
| Some styles of line and symbol are shown on the key in sample/typical colours.                                                                                               |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
| FITTINGS                                                                                                                                                                     |              | STRUCTURES |                          |           |                           |        |                             |         |                          |             |                  | OTHER STRUCTURES   |                       |                      |                       |
|                                                                                                                                                                              | Hydrant      |            | Manhole - Foul           |           | Pumping Station - Surface |        | Pumping Stn - Foul/Combined |         | Gully                    |             | Attenuation Tank |                    | Tunnel                |                      | Interceptor           |
|                                                                                                                                                                              | Other        |            | Manhole - Surface        |           | Vent Column               |        | Rodding Eye                 |         | Catchpit                 |             | Storage Tank     |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            | Manhole - Combined       |           | Flushing Chamber          |        | Soakaway                    |         | Non Return Valve         |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            | Inlet                    |           | Outfall                   |        |                             |         | Air Valve                |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            | Lamphole                 |           | Bifurcation - Foul        |        | Bifurcation - Surface       |         | Bifurcation - Combined   |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            | Bifurcation - Foul       |           | Bifurcation - Surface     |        | Bifurcation - Combined      |         | Combined Sewage Overflow |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            | Bifurcation - Combined   |           | Combined Sewage Overflow  |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            | Combined Sewage Overflow |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |
|                                                                                                                                                                              |              |            |                          |           |                           |        |                             |         |                          |             |                  |                    |                       |                      |                       |

# Wessex Water Network Map



Reproduced from the Ordnance Survey map with the permission of the Controller of His Majesty's Stationery Office. © Crown copyright and database rights (2025) OS AC0000848304

| WATER MAINS                                                                                                                      | SEWERS                                                                                                                                                                                                                                                                                                        | STRATEGIC PUBLIC                                                                                                                                                                                                                                                                                            | PRIVATE                                                                                                                                                                                                                                                                                                     | SECTION 104                                                                                                                                                                                                                                                                                                 | OTHER WESSEX PIPES                                                                                                                                                | NON-WESSEX / UNKNOWN                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>Distribution</li><li>Washout</li><li>Raw Water</li><li>Abandoned</li><li>Private</li></ul> | <ul style="list-style-type: none"><li>Foul</li><li>Surface</li><li>Combined</li><li>Abandoned</li></ul>                                                                                                                                                                                                       | <ul style="list-style-type: none"><li>Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).</li></ul>                                                                                | <ul style="list-style-type: none"><li>Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).</li></ul>                                                                                | <ul style="list-style-type: none"><li>Colours generally indicate the use of the sewer/drain (i.e Red - Foul, Dark Blue - Surface, Magenta - Combined/Dual Use, Light Green - Highway Drain, Mid Green - Overflow).</li></ul>                                                                                | <ul style="list-style-type: none"><li>Rising Mains</li><li>Standby Rising Mains</li><li>EDM Effluent Disposal</li><li>Overflow</li><li>Syphon</li></ul>           | <ul style="list-style-type: none"><li>Private Rising Mains</li><li>Culverted Watercourse</li><li>Highway Drain</li><li>Use Unknown</li><li>Status Unknown</li></ul> |
| <b>FITTINGS</b> <ul style="list-style-type: none"><li>Hydrant</li><li>Other</li></ul>                                            | <b>STRUCTURES</b> <ul style="list-style-type: none"><li>Manhole - Foul</li><li>Manhole - Surface</li><li>Manhole - Combined</li><li>Inlet</li><li>Outfall</li><li>Lamphole</li><li>Bifurcation - Foul</li><li>Bifurcation - Surface</li><li>Bifurcation - Combined</li><li>Combined Sewage Overflow</li></ul> | <ul style="list-style-type: none"><li>Pumping Station - Surface</li><li>Pumping Stn - Foul/Combined</li><li>Gully</li><li>Vent Column</li><li>Rodding Eye</li><li>Catchpit</li><li>Flushing Chamber</li><li>Soakaway</li><li>Non Return Valve</li><li>Air Valve</li><li>Hatch Box</li><li>Washout</li></ul> | <ul style="list-style-type: none"><li>Pumping Station - Surface</li><li>Pumping Stn - Foul/Combined</li><li>Gully</li><li>Vent Column</li><li>Rodding Eye</li><li>Catchpit</li><li>Flushing Chamber</li><li>Soakaway</li><li>Non Return Valve</li><li>Air Valve</li><li>Hatch Box</li><li>Washout</li></ul> | <ul style="list-style-type: none"><li>Pumping Station - Surface</li><li>Pumping Stn - Foul/Combined</li><li>Gully</li><li>Vent Column</li><li>Rodding Eye</li><li>Catchpit</li><li>Flushing Chamber</li><li>Soakaway</li><li>Non Return Valve</li><li>Air Valve</li><li>Hatch Box</li><li>Washout</li></ul> | <ul style="list-style-type: none"><li>OTHER STRUCTURES</li><li>Attenuation Tank</li><li>Storage Tank</li><li>Chamber</li><li>Tunnel</li><li>Interceptor</li></ul> | <b>Wessex Water</b><br>YTL GROUP<br>                                                                                                                                |

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

**Date:** 03/10/2025  
**Centre:** 389276E, 144322N  
**Scale:** 1:625  
(when printed at A4 size)

**Appendix D**  
**SuDS Maintenance Plan**



**SuDS Management & Maintenance Strategy**

---

**Maintenance and Management**

The attenuation basins, swales, connecting pipework, chambers, and flow controls would be maintained by a management company set up by the developer. As construction has not yet commenced, the process of finalising the management company contract has not yet commenced. The developer will ensure that the measures as outlined below form part of the management company contract details, for the ongoing maintenance of all SuDS features on site.

The indicative maintenance requirements for each proposed SuDS component is given below. Taken from CIRIA report C753 "The SuDS Manual".

**Drainage Pipes**

| <b>Maintenance schedule</b>   | <b>Required action</b>                                                        | <b>Typical frequency</b> |
|-------------------------------|-------------------------------------------------------------------------------|--------------------------|
| <b>Regular Maintenance</b>    | Remove sediment and debris from inspection chambers and flow control chambers | Annually                 |
|                               | Cleaning of gutters and any filters on downpipes                              | Annually                 |
|                               | Remove any root ingress                                                       | As required              |
| <b>Occasional Maintenance</b> | CCTV survey of drains to check alignment, cracking and joint displacement     | 10 year intervals        |

**SuDS Management & Maintenance Strategy****Attenuation Basins**

| <b>Maintenance schedule</b>   | <b>Maintenance Task</b>                                                                                   | <b>Frequency</b>                                        |
|-------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| <b>Regular Maintenance</b>    | Remove litter and debris                                                                                  | Monthly (or as required)                                |
|                               | Cut the grass – for spillways and access routes                                                           | Monthly (during growing season), or as required         |
|                               | Cut grass - meadow grass in and around basin                                                              | Half yearly (spring, before nesting season, and autumn) |
|                               | Manage other vegetation and remove nuisance plants                                                        | Monthly (at start, then as required)                    |
|                               | Inspect inlets, outlets, and overflows for blockages, and clear is required                               | Monthly                                                 |
|                               | Inspect banksides, structures, pipework etc. for evidence of physical damage                              | Monthly                                                 |
|                               | Inspect inlets and facility surface for silt accumulation. Establish appropriate silt removal frequencies | Monthly (for first year), then annually or as required  |
|                               | Check any penstocks and other mechanical devices                                                          | Annually                                                |
|                               | Tidy all dead growth before start of growing season                                                       | Annually                                                |
|                               | Remove sediment from inlets, outlets and forebays                                                         | Annually (or as required)                               |
|                               | Manage wetland plants in outlet pool- where provided                                                      | Annually                                                |
| <b>Occasional Maintenance</b> | Reseed areas of poor vegetation growth                                                                    | As required                                             |

**SuDS Management & Maintenance Strategy**

|                         |                                                                            |                                                                                                                       |
|-------------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
|                         | Prune and trim any trees and remove cuttings                               | Every 2 years, or as required                                                                                         |
|                         | Remove sediment from inlets, outlets, forebay and main basin when required | Every 5 years, or as required (likely to be minimal requirements where effective upstream source control is provided) |
| <b>Remedial Actions</b> | Repair erosion or other damage by reseeding or returfing                   | As required                                                                                                           |
|                         | Realignment of rip-rap                                                     | As required                                                                                                           |
|                         | Repair/rehabilitation of inlets, outlets and overflows                     | As required                                                                                                           |
|                         | Relevel uneven levels and reinstate design levels                          | As required                                                                                                           |

**Swales**

| <b>Maintenance schedule</b> | <b>Maintenance Task</b>                                                                                                      | <b>Frequency</b>                               |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| <b>Regular Maintenance</b>  | Remove litter and debris                                                                                                     | Monthly, or as required                        |
|                             | Cut the grass – to retain grass height within specified design range                                                         | Monthly (during growing season) or as required |
|                             | Manage other vegetation and remove nuisance plants                                                                           | Monthly at start, then as required             |
|                             | Inspect inlets, outlets and overflows for blockages, and clear if required                                                   | Monthly                                        |
|                             | Inspect infiltration surfaces for ponding, compaction, silt accumulation, record areas where water is ponding for > 48 hours | Monthly, or when required                      |

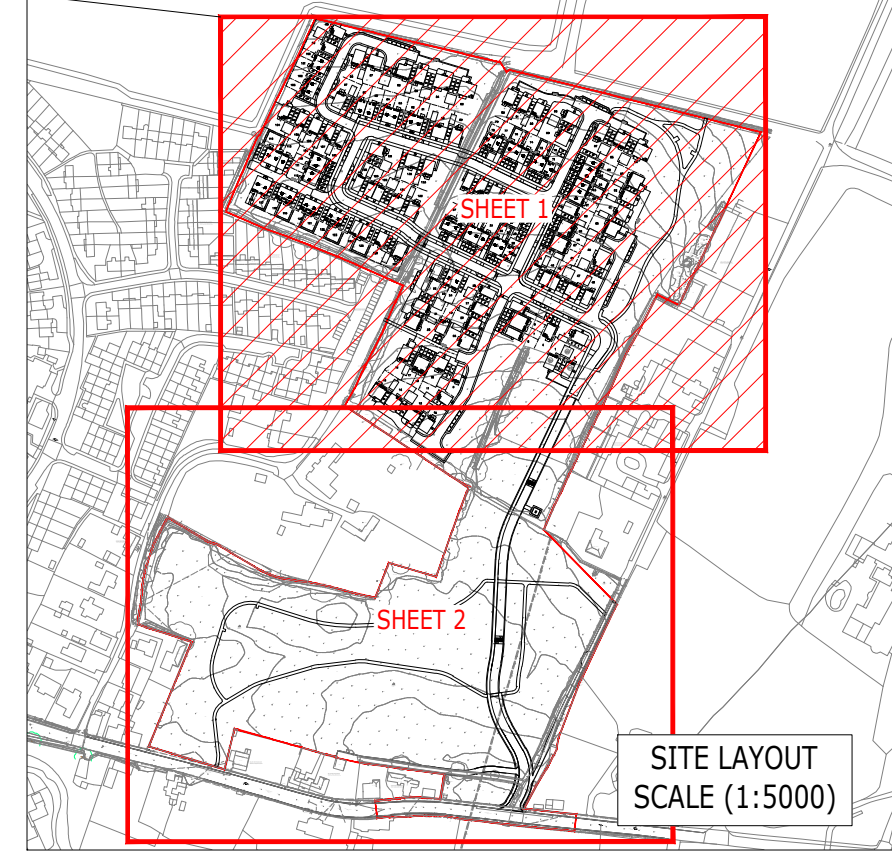
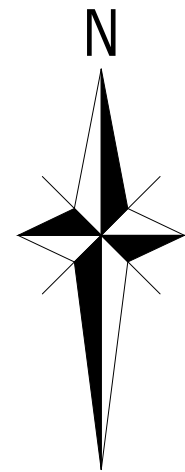
**SuDS Management & Maintenance Strategy**

|                               |                                                                                                                                        |                                                                            |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|
|                               | Inspect vegetation coverage                                                                                                            | Monthly for 6 months, quarterly for 2 years, then half yearly              |
|                               | Inspect inlets and facility surface for silt accumulation, establish appropriate silt removal frequencies                              | Half yearly                                                                |
| <b>Occasional Maintenance</b> | Reseed areas of poor vegetation growth; alter plant types to better suit conditions, if required                                       | As required or if bare soil is exposed over > 10% of the filter strip area |
| <b>Remedial Actions</b>       | Repair erosion or other damage by re-turfing or reseed                                                                                 | As required                                                                |
|                               | Relevel uneven surfaces and reinstate design levels                                                                                    | As required                                                                |
|                               | Scarify and spike topsoil layer to improve infiltration performance, break up silt deposits and prevent compaction of the soil surface | As required                                                                |
|                               | Remove build-up of sediment on upstream gravel trench, flow spreader or at top of filter strip                                         | As required                                                                |
|                               | Remove and dispose of oils or petrol residues using safe standard practices                                                            | As required                                                                |



**Appendix E**  
**Proposed Drainage Strategy**





- NOTES:
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATION, INC. RISK ASSESSMENTS AND ALL OTHER RELATED DRAWINGS ISSUED BY THE ENGINEER.
  - DO NOT SCALE FROM THIS DRAWING. WORK FROM FIGURED DIMENSIONS ONLY.
  - ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN METRES UNLESS OTHERWISE STATED.
  - ALL DIMENSIONS, LEVELS AND SURVEY GRID CO-ORDINATES ARE TO BE CHECKED ON SITE AND THE ENGINEER NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF THE WORKS.
  - NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS PERMITTED WITHOUT PRIOR PERMISSION FROM THE ENGINEER.
  - ANY WORKS OUTSIDE RED SITE BOUNDARY ARE FOR INFORMATION PURPOSES ONLY. UNLESS SPECIFICALLY NOTED, ALL WORKS OUTSIDE THE SITE BOUNDARY WILL BE UNDERTAKEN BY OTHERS UNDER A SEPARATE CONTRACT.

#### INFORMATION SUMMARY

| INFORMATION TYPE     | SOURCE            | REFERENCE           | REVISION & DATE   |
|----------------------|-------------------|---------------------|-------------------|
| SITE LAYOUT          | PEGASUS           | P22-1991_DE-02-O    | 27/02/2026 Rev. 0 |
| TOPOGRAPHICAL SURVEY | ENCOMPASS SURVEYS | ENC/200125/3797-S2  | JAN 2025          |
| OS                   | PEGASUS           | P22-1991_DE_02_F_01 | 13/10/25 Rev. -   |

| SUMMARY OF AREAS AND DISCHARGE RATES                                              |                       |                       |                         |                        |
|-----------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------------|------------------------|
| CATCHMENT                                                                         | DEVELOPABLE AREA (HA) | IMPERMEABLE AREA (HA) | INFILTRATION RATE (m/s) | STORAGE REQUIRED (m³)* |
| A                                                                                 | 4.560                 | 3.000*                | $2.30 \times 10^{-3}$   | 3,640                  |
| B                                                                                 | 0.028                 | 0.028                 | $2.30 \times 10^{-3}$   | 31                     |
| TOTAL SITE AREA = 10.40ha<br>**45% CLIMATE CHANGE, FEH-22 DATA AND CV VALUE OF 1. |                       |                       |                         |                        |



| P4  | LEVELS UPDATED TO REVISED SITE ACCESS                                               | DC  | DC  | 3M  | 09/03/26 |
|-----|-------------------------------------------------------------------------------------|-----|-----|-----|----------|
| P3  | MANHOLES AND CATCHMENTS ALIGNED TO REVISED SITE ACCESS                              | DC  | DC  | 3M  | 23/02/26 |
| P2  | PIPE DIAMETERS REDUCED FOR VALUE ENGINEERING. INFILTRATION BASIN BY ACCESS UPDATED. | DC  | DC  | AW  | 13/02/26 |
| P1  | PRELIMINARY ISSUE                                                                   | DC  | DC  | AW  | 19/12/25 |
| Rev | Description                                                                         | Drn | Chk | App | Date     |

|          |             |         |                  |
|----------|-------------|---------|------------------|
| Purpose: | PRELIMINARY | Status: | NOT YET APPROVED |
|----------|-------------|---------|------------------|

**ARDENT CONSULTING ENGINEERS**  
AN EMPLOYEE OWNED COMPANY

Third Floor  
The Hallmark Building  
52-56 Leadenhall Street  
London  
EC3M 5JE

Tel: 020 7680 4088  
Web: [www.ardent-ce.co.uk](http://www.ardent-ce.co.uk)  
E-mail: [enquiries@ardent-ce.co.uk](mailto:enquiries@ardent-ce.co.uk)

Client:

BELLWAY HOMES LIMITED

BOREHAM ROAD, WARMINSTER

Drawing Title:  
**PROPOSED DRAINAGE STRATEGY  
(SHEET 1 OF 2)**

|          |          |            |          |                |                             |          |    |
|----------|----------|------------|----------|----------------|-----------------------------|----------|----|
| Drawn by | DC       | Checked by | DC       | Approved by    | AW                          | Revision | P4 |
| A1 Scale | 1:500@A1 | Date       | DEC 2025 | Drawing Number | 2204791-ACE-XX-XX-DR-C-0601 |          |    |

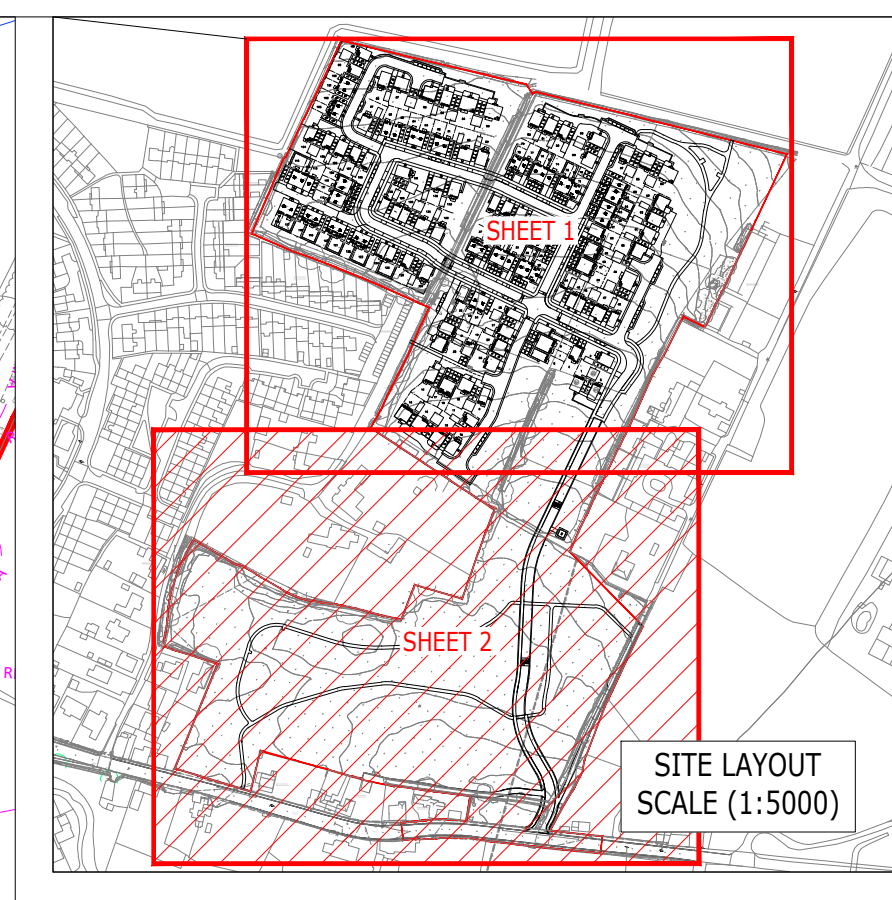
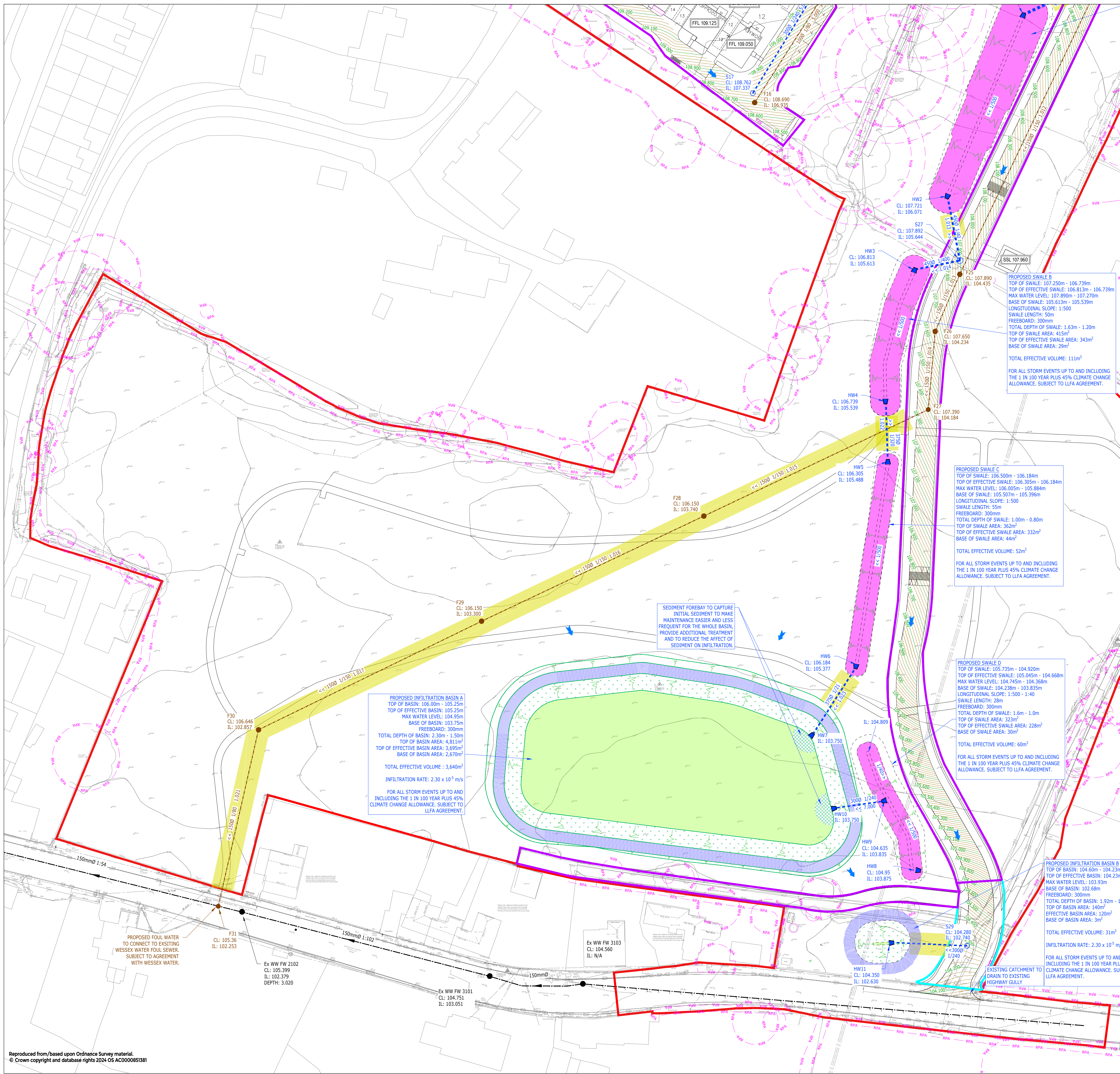
**KEY**

- SITE BOUNDARY
- PROPOSED FOUL WATER SEWER & MANHOLE
- PROPOSED SURFACE WATER SEWER & MANHOLE
- PROPOSED HEADWALL
- PROPOSED INFILTRATION BASIN/SUDS
- PROPOSED INFILTRATION SWALE
- PROPOSED SWALE
- 1:3 SLOPE
- MAJOR ROAD CONTOURS (0.5m INTERVALS)
- MINOR ROAD CONTOURS (0.1m INTERVALS)
- ROOT PROTECTION AREA
- VETERAN TREE BUFFER
- CATCHMENT A
- CATCHMENT B
- 3m SEWER EASEMENT
- 3m MAINTENANCE STRIP
- SEDIMENT FOREBAYS
- EXISTING WESSEX WATER FOUL WATER
- FLOOD EXCEEDANCE FLOW ROUTE ARROWS
- FINISHED FLOOR LEVEL
- GARAGE FLOOR LEVEL

PROPOSED SWALE A  
TOP OF SWALE: 108.650m - 107.570m  
TOP OF EFFECTIVE SWALE: 108.190m - 107.570m  
MAX WATER LEVEL: 107.890m - 107.270m  
BASE OF SWALE: 106.178m - 106.071m  
LONGITUDINAL SLOPE: 1:500  
SWALE LENGTH: 52m  
FREEBOARD: 300mm  
TOTAL DEPTH OF SWALE: 2.00m - 1.50m  
TOP OF SWALE AREA: 800m²  
TOP OF EFFECTIVE SWALE AREA: 711m²  
BASE OF SWALE AREA: 42m²  
TOTAL EFFECTIVE VOLUME: 350m³

FOR ALL STORM EVENTS UP TO AND INCLUDING THE 1 IN 100 YEAR PLUS 45% CLIMATE CHANGE ALLOWANCE. SUBJECT TO LFA AGREEMENT.

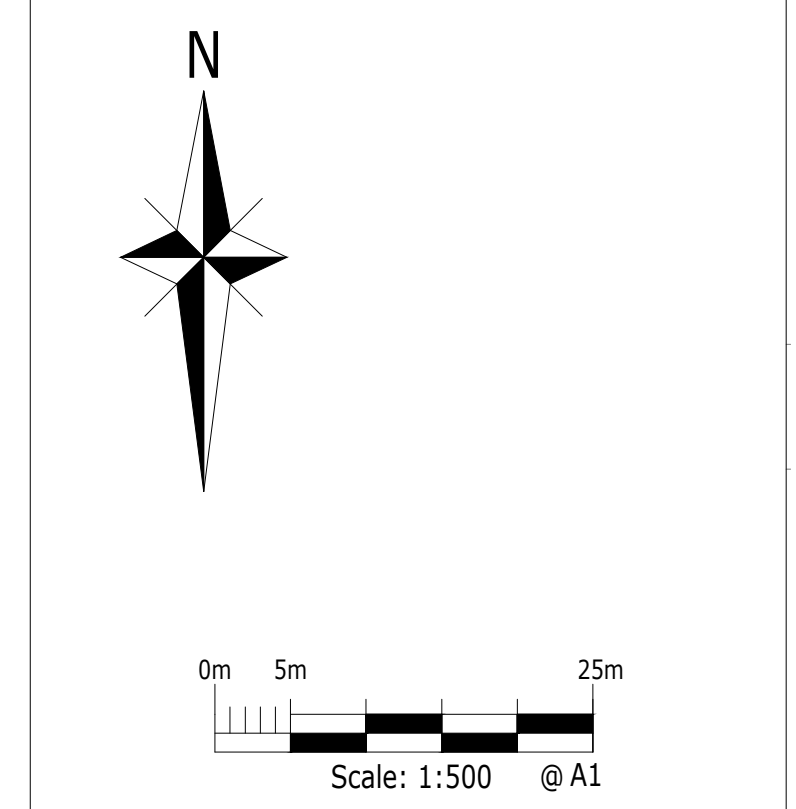




- NOTES:
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATION, INC. RISK ASSESSMENTS AND ALL OTHER RELATED DRAWINGS ISSUED BY THE ENGINEER.
  - DO NOT SCALE FROM THIS DRAWING. WORK FROM FIGURED DIMENSIONS ONLY.
  - ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN METRES UNLESS OTHERWISE STATED.
  - ALL DIMENSIONS, LEVELS AND SURVEY GRID CO-ORDINATES ARE TO BE CHECKED ON SITE AND THE ENGINEER NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF THE WORKS.
  - NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS PERMITTED WITHOUT PRIOR PERMISSION FROM THE ENGINEER.
  - ANY WORKS OUTSIDE RED SITE BOUNDARY ARE FOR INFORMATION PURPOSES ONLY. UNLESS SPECIFICALLY NOTED, ALL WORKS OUTSIDE THE SITE BOUNDARY WILL BE UNDERTAKEN BY OTHERS UNDER A SEPARATE CONTRACT.

| INFORMATION SUMMARY  |                   |                     |                   |
|----------------------|-------------------|---------------------|-------------------|
| INFORMATION TYPE     | SOURCE            | REFERENCE           | REVISION & DATE   |
| SITE LAYOUT          | PEGASUS           | P22-1991_DE-02-O    | 27/02/2026 Rev. O |
| TOPOGRAPHICAL SURVEY | ENCOMPASS SURVEYS | ENC/200125/3797-S2  | JAN 2025          |
| OS                   | PEGASUS           | P22-1991_DE_02_F_01 | 13/10/25 Rev. -   |

| SUMMARY OF AREAS AND DISCHARGE RATES                                                                        |                       |                       |                         |                         |
|-------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------------------|-------------------------|
| CATCHMENT                                                                                                   | DEVELOPABLE AREA (HA) | IMPERMEABLE AREA (HA) | INFILTRATION RATE (m/s) | STORAGE REQUIRED (m³)** |
| A                                                                                                           | 4.560                 | 3.000*                | $2.30 \times 10^{-5}$   | 3,640                   |
| B                                                                                                           | 0.028                 | 0.028                 | $2.30 \times 10^{-5}$   | 31                      |
| TOTAL SITE AREA = 10.40ha<br>**INCLUDES URBAN CREEP<br>**45% CLIMATE CHANGE, FEH-22 DATA AND CV VALUE OF 1. |                       |                       |                         |                         |



|     |                                                                                     |     |     |     |          |
|-----|-------------------------------------------------------------------------------------|-----|-----|-----|----------|
| P4  | LEVELS UPDATED TO REVISED SITE ACCESS                                               | DC  | DC  | 3M  | 09/03/26 |
| P3  | MANHOLES AND CATCHMENTS ALIGNED TO REVISED SITE ACCESS                              | DC  | DC  | 3M  | 23/02/26 |
| P2  | PIPE DIAMETERS REDUCED FOR VALUE ENGINEERING. INFILTRATION BASIN BY ACCESS UPDATED. | DC  | DC  | AW  | 13/02/26 |
| P1  | PRELIMINARY ISSUE                                                                   | DC  | DC  | AW  | 19/12/25 |
| Rev | Description                                                                         | Drn | Chk | App | Date     |

|          |             |         |                  |
|----------|-------------|---------|------------------|
| Purpose: | PRELIMINARY | Status: | NOT YET APPROVED |
|----------|-------------|---------|------------------|

**ARDENT** CONSULTING ENGINEERS  
AN EMPLOYEE OWNED COMPANY

Third Floor  
The Hallmark Building  
52-56 Leadenhall Street  
London  
EC3M 5JE  
Tel: 020 7680 4088  
Web: [www.ardent-ce.co.uk](http://www.ardent-ce.co.uk)  
E-mail: [enquiries@ardent-ce.co.uk](mailto:enquiries@ardent-ce.co.uk)

Client:

**BELLWAY HOMES LIMITED**

Project Title:  
**BOREHAM ROAD, WARMINSTER**

|                                                                        |                  |                   |                           |
|------------------------------------------------------------------------|------------------|-------------------|---------------------------|
| Drawing Title:<br><b>PROPOSED DRAINAGE STRATEGY<br/>(SHEET 2 OF 2)</b> |                  |                   |                           |
| Drawn by<br>DC                                                         | Checked by<br>DC | Approved by<br>AW | Revision<br><br><b>P4</b> |
| A1 Scale<br>1:500@A1                                                   | Date<br>DEC 2025 |                   |                           |
| Drawing Number<br><b>2204791-ACE-XX-XX-DR-C-0602</b>                   |                  |                   |                           |

- KEY**
- SITE BOUNDARY
  - PROPOSED FOUL WATER SEWER & MANHOLE
  - PROPOSED SURFACE WATER SEWER & MANHOLE
  - PROPOSED HEADWALL
  - PROPOSED INFILTRATION BASIN/SUDS
  - PROPOSED INFILTRATION SWALE
  - PROPOSED SWALE
  - 1:3 SLOPE
  - MAJOR ROAD CONTOURS (0.5m INTERVALS)
  - MINOR ROAD CONTOURS (0.1m INTERVALS)
  - ROOT PROTECTION AREA
  - VETERAN TREE BUFFER
  - CATCHMENT A
  - CATCHMENT B
  - 3m SEWER EASEMENT
  - 3m MAINTENANCE STRIP
  - SEDIMENT FOREBAYS
  - EXISTING WESSEX WATER FOUL WATER
  - FLOOD EXCEEDANCE FLOW ROUTE ARROWS
  - FINISHED FLOOR LEVEL
  - GARAGE FLOOR LEVEL



**Appendix F**  
**Drainage Calculations**



### Nodes

| Name          | Area<br>(ha) | T of E<br>(mins) | Cover<br>Level<br>(m) | Diameter<br>(mm) | Easting<br>(m) | Northing<br>(m) | Depth<br>(m) |
|---------------|--------------|------------------|-----------------------|------------------|----------------|-----------------|--------------|
| S1            | 0.085        | 5.00             | 114.310               | 1350             | 389405.375     | 144677.663      | 1.628        |
| S2            | 0.085        | 5.00             | 114.324               | 1350             | 389381.399     | 144685.042      | 1.760        |
| S3            | 0.085        | 5.00             | 114.211               | 1350             | 389375.339     | 144681.976      | 1.682        |
| S4            | 0.085        | 5.00             | 113.485               | 1350             | 389357.705     | 144643.320      | 1.650        |
| S5            | 0.085        | 5.00             | 113.350               | 1350             | 389360.137     | 144637.697      | 1.800        |
| S6            | 0.085        | 5.00             | 113.100               | 1350             | 389382.584     | 144623.265      | 2.025        |
| S12           | 0.085        | 5.00             | 112.620               | 1350             | 389374.861     | 144603.268      | 2.035        |
| S10           | 0.085        | 5.00             | 112.639               | 1350             | 389328.592     | 144595.259      | 2.049        |
| S11           | 0.085        | 5.00             | 112.229               | 1350             | 389357.403     | 144582.270      | 1.771        |
| S13           | 0.085        | 5.00             | 112.200               | 1350             | 389367.024     | 144584.157      | 1.720        |
| S14           | 0.085        | 5.00             | 112.100               | 1350             | 389369.601     | 144579.212      | 2.300        |
| S15           | 0.085        | 5.00             | 111.100               | 1350             | 389407.351     | 144561.381      | 4.311        |
| S16           | 0.085        | 5.00             | 110.770               | 1350             | 389420.892     | 144552.001      | 4.014        |
| HW8           | 0.048        | 5.00             | 104.950               | 1200             | 389466.853     | 144207.810      | 1.073        |
| S7            | 0.085        | 5.00             | 111.962               | 1350             | 389457.718     | 144603.878      | 3.962        |
| S8            | 0.085        | 5.00             | 113.579               | 1350             | 389536.487     | 144638.885      | 2.079        |
| S9            | 0.085        | 5.00             | 111.980               | 1350             | 389508.092     | 144579.739      | 5.232        |
| S17           | 0.043        | 5.00             | 108.762               | 1350             | 389430.374     | 144417.713      | 1.425        |
| S18           | 0.085        | 5.00             | 109.265               | 1350             | 389452.840     | 144454.296      | 2.182        |
| S20           | 0.043        | 5.00             | 110.097               | 1200             | 389467.676     | 144496.302      | 3.155        |
| S21           | 0.128        | 5.00             | 110.530               | 1500             | 389480.658     | 144523.120      | 4.057        |
| S31           | 0.085        | 5.00             | 111.233               | 1350             | 389561.835     | 144550.462      | 1.575        |
| S32           | 0.128        | 5.00             | 109.749               | 1500             | 389536.346     | 144496.933      | 3.415        |
| S33           | 0.085        | 5.00             | 109.623               | 1500             | 389542.492     | 144491.821      | 3.305        |
| S35           | 0.085        | 5.00             | 109.491               | 1500             | 389543.722     | 144482.898      | 3.191        |
| S26a          | 0.085        | 5.00             | 108.996               | 1500             | 389522.882     | 144450.545      | 2.773        |
| HW1           | 0.085        | 5.00             | 108.178               | 1500             | 389503.290     | 144439.446      | 2.000        |
| HW2           | 0.085        | 5.00             | 107.721               | 1500             | 389482.642     | 144390.145      | 1.650        |
| S37           | 0.085        | 5.00             | 107.892               | 1500             | 389485.813     | 144373.394      | 2.248        |
| HW3           | 0.085        | 5.00             | 106.813               | 1500             | 389473.960     | 144370.545      | 1.200        |
| SWALE 2A      | 0.085        | 5.00             | 106.791               | 1500             | 389469.668     | 144360.586      | 1.201        |
| SWALE 2B      | 0.085        | 5.00             | 106.760               | 1500             | 389465.777     | 144345.220      | 1.202        |
| HW4           | 0.085        | 5.00             | 106.739               | 1500             | 389465.977     | 144334.743      | 1.200        |
| HW5           | 0.085        | 5.00             | 106.305               | 1500             | 389466.708     | 144318.563      | 0.817        |
| HW6           | 0.085        | 5.00             | 106.184               | 1500             | 389458.106     | 144263.777      | 0.807        |
| DUMMY INLET   |              | 5.00             | 105.000               | 1200             | 389467.044     | 144196.989      | 1.075        |
| BASIN A       |              |                  | 105.250               | 1500             | 389441.756     | 144232.743      | 1.500        |
| HW9           | 0.057        | 5.00             | 105.191               | 1350             | 389466.743     | 144228.038      | 1.356        |
| S19           |              |                  | 109.510               | 1350             | 389460.552     | 144475.912      | 2.500        |
| DUMMY OUTFALL |              |                  | 104.500               | 1350             | 389431.980     | 144230.749      | 1.500        |
| BASIN B       | 0.028        |                  | 104.230               |                  | 389474.000     | 144183.000      | 1.550        |

Links

| Name  | US Node | DS Node | Length (m) | ks (mm) / n | US IL (m) | DS IL (m) | Fall (m) | Slope (1:X) | Dia (mm) | T of C (mins) | Rain (mm/hr) |
|-------|---------|---------|------------|-------------|-----------|-----------|----------|-------------|----------|---------------|--------------|
| 1.000 | S1      | S2      | 28.418     | 0.600       | 112.682   | 112.564   | 0.118    | 240.0       | 300      | 5.47          | 45.8         |
| 1.001 | S2      | S3      | 8.397      | 0.600       | 112.564   | 112.529   | 0.035    | 240.0       | 300      | 5.61          | 45.3         |
| 1.002 | S3      | S4      | 44.142     | 0.600       | 112.529   | 111.835   | 0.694    | 63.6        | 300      | 5.98          | 44.0         |
| 1.003 | S4      | S5      | 7.639      | 0.600       | 111.835   | 111.700   | 0.135    | 56.6        | 300      | 6.04          | 43.9         |
| 1.004 | S5      | S6      | 28.407     | 0.600       | 111.550   | 111.225   | 0.325    | 87.4        | 450      | 6.26          | 43.2         |
| 1.005 | S6      | S7      | 77.595     | 0.600       | 111.075   | 108.000   | 3.075    | 25.2        | 600      | 6.52          | 42.4         |
| 3.000 | S12     | S13     | 5.342      | 0.600       | 110.585   | 110.480   | 0.105    | 50.9        | 300      | 5.04          | 47.2         |
| 2.000 | S10     | S11     | 31.604     | 0.600       | 110.590   | 110.458   | 0.132    | 240.0       | 300      | 5.52          | 45.6         |
| 2.001 | S11     | S14     | 9.804      | 0.600       | 110.511   | 110.100   | 0.411    | 23.9        | 300      | 5.57          | 45.4         |
| 3.001 | S13     | S14     | 5.576      | 0.600       | 110.480   | 110.100   | 0.380    | 14.7        | 300      | 5.06          | 47.1         |
| 2.002 | S14     | S15     | 41.749     | 0.600       | 109.800   | 106.789   | 3.011    | 13.9        | 600      | 5.68          | 45.1         |
| 2.003 | S15     | S16     | 16.473     | 0.600       | 106.789   | 106.756   | 0.033    | 499.2       | 600      | 5.93          | 44.2         |
| 2.004 | S16     | S21     | 66.378     | 0.600       | 106.756   | 106.623   | 0.133    | 499.1       | 600      | 6.95          | 41.1         |
| 7.000 | HW9     | BASIN A | 16.000     | 0.600       | 103.835   | 103.750   | 0.085    | 188.2       | 300      | 5.23          | 46.5         |
| 1.006 | S7      | S9      | 57.248     | 0.600       | 108.000   | 106.748   | 1.252    | 45.7        | 600      | 6.79          | 41.6         |
| 4.000 | S8      | S9      | 67.219     | 0.600       | 111.500   | 107.048   | 4.452    | 15.1        | 300      | 5.28          | 46.4         |
| 1.007 | S9      | S21     | 61.305     | 0.600       | 106.748   | 106.623   | 0.125    | 490.4       | 600      | 7.72          | 39.2         |
| 5.000 | S17     | S18     | 42.931     | 0.600       | 107.337   | 107.158   | 0.179    | 239.8       | 300      | 5.71          | 45.0         |
| 5.001 | S18     | S19     | 22.951     | 0.600       | 107.083   | 107.010   | 0.073    | 314.4       | 375      | 6.08          | 43.7         |
| 5.003 | S20     | S21     | 29.795     | 0.600       | 106.942   | 106.848   | 0.094    | 317.0       | 375      | 6.93          | 41.2         |
| 1.008 | S21     | S32     | 61.538     | 0.600       | 106.473   | 106.350   | 0.123    | 500.3       | 750      | 8.55          | 37.2         |
| 6.000 | S31     | S32     | 59.288     | 0.600       | 109.658   | 106.725   | 2.933    | 20.2        | 375      | 5.24          | 46.5         |
| 1.009 | S32     | S33     | 7.994      | 0.600       | 106.334   | 106.318   | 0.016    | 499.6       | 750      | 8.66          | 37.0         |
| 1.010 | S33     | S35     | 9.007      | 0.600       | 106.318   | 106.300   | 0.018    | 500.4       | 750      | 8.78          | 36.7         |

| Name  | Vel (m/s) | Cap (l/s) | Flow (l/s) | US Depth (m) | DS Depth (m) | Σ Area (ha) | Σ Add Inflow (l/s) | Pro Depth (mm) | Pro Velocity (m/s) |
|-------|-----------|-----------|------------|--------------|--------------|-------------|--------------------|----------------|--------------------|
| 1.000 | 1.010     | 71.4      | 14.1       | 1.328        | 1.460        | 0.085       | 0.0                | 90             | 0.790              |
| 1.001 | 1.010     | 71.4      | 27.8       | 1.460        | 1.382        | 0.170       | 0.0                | 130            | 0.949              |
| 1.002 | 1.974     | 139.6     | 40.6       | 1.382        | 1.350        | 0.255       | 0.0                | 110            | 1.719              |
| 1.003 | 2.094     | 148.0     | 53.9       | 1.350        | 1.350        | 0.340       | 0.0                | 125            | 1.935              |
| 1.004 | 2.175     | 345.9     | 66.4       | 1.350        | 1.425        | 0.425       | 0.0                | 132            | 1.691              |
| 1.005 | 4.860     | 1374.2    | 78.2       | 1.425        | 3.362        | 0.510       | 0.0                | 96             | 2.697              |
| 3.000 | 2.209     | 156.1     | 14.5       | 1.735        | 1.420        | 0.085       | 0.0                | 61             | 1.397              |
| 2.000 | 1.010     | 71.4      | 14.0       | 1.749        | 1.471        | 0.085       | 0.0                | 90             | 0.790              |
| 2.001 | 3.232     | 228.5     | 27.9       | 1.418        | 1.700        | 0.170       | 0.0                | 70             | 2.209              |
| 3.001 | 4.124     | 291.5     | 28.9       | 1.420        | 1.700        | 0.170       | 0.0                | 64             | 2.670              |
| 2.002 | 6.561     | 1855.1    | 69.2       | 1.700        | 3.711        | 0.425       | 0.0                | 78             | 3.215              |
| 2.003 | 1.083     | 306.2     | 81.5       | 3.711        | 3.414        | 0.510       | 0.0                | 210            | 0.921              |
| 2.004 | 1.083     | 306.2     | 88.5       | 3.414        | 3.307        | 0.595       | 0.0                | 220            | 0.943              |
| 7.000 | 1.142     | 80.7      | 9.6        | 1.056        | 1.200        | 0.057       | 0.0                | 69             | 0.775              |
| 1.006 | 3.607     | 1019.9    | 89.5       | 3.362        | 4.632        | 0.595       | 0.0                | 119            | 2.264              |
| 4.000 | 4.066     | 287.4     | 14.3       | 1.779        | 4.632        | 0.085       | 0.0                | 45             | 2.141              |
| 1.007 | 1.093     | 308.9     | 108.2      | 4.632        | 3.307        | 0.765       | 0.0                | 245            | 1.000              |
| 5.000 | 1.011     | 71.4      | 7.0        | 1.125        | 1.807        | 0.043       | 0.0                | 63             | 0.647              |
| 5.001 | 1.016     | 112.2     | 20.2       | 1.807        | 2.125        | 0.128       | 0.0                | 107            | 0.777              |
| 5.003 | 1.012     | 111.8     | 25.5       | 2.780        | 3.307        | 0.171       | 0.0                | 121            | 0.825              |
| 1.008 | 1.244     | 549.6     | 223.2      | 3.307        | 2.649        | 1.659       | 0.0                | 332            | 1.182              |
| 6.000 | 4.045     | 446.8     | 14.3       | 1.200        | 2.649        | 0.085       | 0.0                | 45             | 1.873              |
| 1.009 | 1.245     | 550.0     | 250.3      | 2.665        | 2.555        | 1.872       | 0.0                | 355            | 1.217              |
| 1.010 | 1.244     | 549.5     | 259.7      | 2.555        | 2.441        | 1.957       | 0.0                | 363            | 1.228              |

### Links

| Name   | US Node     | DS Node       | Length (m) | ks (mm) / n | US IL (m) | DS IL (m) | Fall (m) | Slope (1:X) | Dia (mm) | T of C (mins) | Rain (mm/hr) |
|--------|-------------|---------------|------------|-------------|-----------|-----------|----------|-------------|----------|---------------|--------------|
| 1.011  | S35         | S26a          | 38.484     | 0.600       | 106.300   | 106.223   | 0.077    | 499.8       | 750      | 9.29          | 35.7         |
| 1.012  | S26a        | HW1           | 22.517     | 0.600       | 106.223   | 106.178   | 0.045    | 500.4       | 750      | 9.59          | 35.1         |
| 7.001  | BASIN A     | DUMMY OUTFALL | 9.977      | 0.600       | 103.750   | 103.000   | 0.750    | 13.3        | 375      | 5.27          | 46.4         |
| 1.013  | HW2         | S37           | 17.048     | 0.600       | 106.071   | 105.644   | 0.427    | 39.9        | 450      | 5.09          | 47.0         |
| 1.014  | S37         | HW3           | 12.190     | 0.600       | 105.644   | 105.613   | 0.031    | 393.2       | 450      | 5.29          | 46.4         |
| 1.023  | HW6         | BASIN A       | 35.078     | 0.600       | 105.377   | 103.750   | 1.627    | 21.6        | 375      | 5.15          | 46.8         |
| 11.000 | DUMMY INLET | HW8           | 10.823     | 0.600       | 103.925   | 103.877   | 0.048    | 225.5       | 150      | 5.27          | 46.4         |
| 5.002  | S19         | S20           | 21.599     | 0.600       | 107.010   | 106.942   | 0.068    | 317.6       | 375      | 6.44          | 42.7         |
| 1.022  | HW4         | HW5           | 16.197     | 0.600       | 105.539   | 105.488   | 0.051    | 317.6       | 375      | 5.27          | 46.4         |

| Name   | Vel (m/s) | Cap (l/s) | Flow (l/s) | US Depth (m) | DS Depth (m) | Σ Area (ha) | Σ Add Inflow (l/s) | Pro Depth (mm) | Pro Velocity (m/s) |
|--------|-----------|-----------|------------|--------------|--------------|-------------|--------------------|----------------|--------------------|
| 1.011  | 1.245     | 549.9     | 263.2      | 2.441        | 2.023        | 2.042       | 0.0                | 365            | 1.231              |
| 1.012  | 1.244     | 549.5     | 269.6      | 2.023        | 1.250        | 2.127       | 0.0                | 371            | 1.239              |
| 7.001  | 4.989     | 551.1     | 23.8       | 1.125        | 1.125        | 0.142       | 0.0                | 52             | 2.535              |
| 1.013  | 3.225     | 512.8     | 14.4       | 1.200        | 1.798        | 0.085       | 0.0                | 51             | 1.452              |
| 1.014  | 1.019     | 162.0     | 28.5       | 1.798        | 0.750        | 0.170       | 0.0                | 127            | 0.774              |
| 1.023  | 3.916     | 432.6     | 14.4       | 0.432        | 1.125        | 0.085       | 0.0                | 47             | 1.849              |
| 11.000 | 0.665     | 11.8      | 0.0        | 0.925        | 0.923        | 0.000       | 0.0                | 0              | 0.000              |
| 5.002  | 1.011     | 111.7     | 19.7       | 2.125        | 2.780        | 0.128       | 0.0                | 106            | 0.767              |
| 1.022  | 1.011     | 111.7     | 14.3       | 0.825        | 0.442        | 0.085       | 0.0                | 90             | 0.700              |

### Pipeline Schedule

| Link  | Length (m) | Slope (1:X) | Dia (mm) | Link Type | US CL (m) | US IL (m) | US Depth (m) | DS CL (m) | DS IL (m) | DS Depth (m) |
|-------|------------|-------------|----------|-----------|-----------|-----------|--------------|-----------|-----------|--------------|
| 1.000 | 28.418     | 240.0       | 300      | Circular  | 114.310   | 112.682   | 1.328        | 114.324   | 112.564   | 1.460        |
| 1.001 | 8.397      | 240.0       | 300      | Circular  | 114.324   | 112.564   | 1.460        | 114.211   | 112.529   | 1.382        |
| 1.002 | 44.142     | 63.6        | 300      | Circular  | 114.211   | 112.529   | 1.382        | 113.485   | 111.835   | 1.350        |
| 1.003 | 7.639      | 56.6        | 300      | Circular  | 113.485   | 111.835   | 1.350        | 113.350   | 111.700   | 1.350        |
| 1.004 | 28.407     | 87.4        | 450      | Circular  | 113.350   | 111.550   | 1.350        | 113.100   | 111.225   | 1.425        |
| 1.005 | 77.595     | 25.2        | 600      | Circular  | 113.100   | 111.075   | 1.425        | 111.962   | 108.000   | 3.362        |
| 3.000 | 5.342      | 50.9        | 300      | Circular  | 112.620   | 110.585   | 1.735        | 112.200   | 110.480   | 1.420        |
| 2.000 | 31.604     | 240.0       | 300      | Circular  | 112.639   | 110.590   | 1.749        | 112.229   | 110.458   | 1.471        |
| 2.001 | 9.804      | 23.9        | 300      | Circular  | 112.229   | 110.511   | 1.418        | 112.100   | 110.100   | 1.700        |
| 3.001 | 5.576      | 14.7        | 300      | Circular  | 112.200   | 110.480   | 1.420        | 112.100   | 110.100   | 1.700        |
| 2.002 | 41.749     | 13.9        | 600      | Circular  | 112.100   | 109.800   | 1.700        | 111.100   | 106.789   | 3.711        |

| Link  | US Node | Dia (mm) | Node Type | MH Type   | DS Node | Dia (mm) | Node Type | MH Type   |
|-------|---------|----------|-----------|-----------|---------|----------|-----------|-----------|
| 1.000 | S1      | 1350     | Manhole   | Adoptable | S2      | 1350     | Manhole   | Adoptable |
| 1.001 | S2      | 1350     | Manhole   | Adoptable | S3      | 1350     | Manhole   | Adoptable |
| 1.002 | S3      | 1350     | Manhole   | Adoptable | S4      | 1350     | Manhole   | Adoptable |
| 1.003 | S4      | 1350     | Manhole   | Adoptable | S5      | 1350     | Manhole   | Adoptable |
| 1.004 | S5      | 1350     | Manhole   | Adoptable | S6      | 1350     | Manhole   | Adoptable |
| 1.005 | S6      | 1350     | Manhole   | Adoptable | S7      | 1350     | Manhole   | Adoptable |
| 3.000 | S12     | 1350     | Manhole   | Adoptable | S13     | 1350     | Manhole   | Adoptable |
| 2.000 | S10     | 1350     | Manhole   | Adoptable | S11     | 1350     | Manhole   | Adoptable |
| 2.001 | S11     | 1350     | Manhole   | Adoptable | S14     | 1350     | Manhole   | Adoptable |
| 3.001 | S13     | 1350     | Manhole   | Adoptable | S14     | 1350     | Manhole   | Adoptable |
| 2.002 | S14     | 1350     | Manhole   | Adoptable | S15     | 1350     | Manhole   | Adoptable |



### Pipeline Schedule

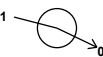
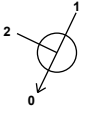
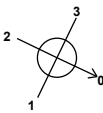
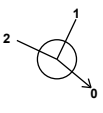
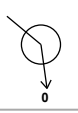
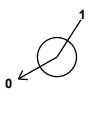
| Link   | Length<br>(m) | Slope<br>(1:X) | Dia<br>(mm) | Link<br>Type | US CL<br>(m) | US IL<br>(m) | US Depth<br>(m) | DS CL<br>(m) | DS IL<br>(m) | DS Depth<br>(m) |
|--------|---------------|----------------|-------------|--------------|--------------|--------------|-----------------|--------------|--------------|-----------------|
| 2.003  | 16.473        | 499.2          | 600         | Circular     | 111.100      | 106.789      | 3.711           | 110.770      | 106.756      | 3.414           |
| 2.004  | 66.378        | 499.1          | 600         | Circular     | 110.770      | 106.756      | 3.414           | 110.530      | 106.623      | 3.307           |
| 7.000  | 16.000        | 188.2          | 300         | Circular     | 105.191      | 103.835      | 1.056           | 105.250      | 103.750      | 1.200           |
| 1.006  | 57.248        | 45.7           | 600         | Circular     | 111.962      | 108.000      | 3.362           | 111.980      | 106.748      | 4.632           |
| 4.000  | 67.219        | 15.1           | 300         | Circular     | 113.579      | 111.500      | 1.779           | 111.980      | 107.048      | 4.632           |
| 1.007  | 61.305        | 490.4          | 600         | Circular     | 111.980      | 106.748      | 4.632           | 110.530      | 106.623      | 3.307           |
| 5.000  | 42.931        | 239.8          | 300         | Circular     | 108.762      | 107.337      | 1.125           | 109.265      | 107.158      | 1.807           |
| 5.001  | 22.951        | 314.4          | 375         | Circular     | 109.265      | 107.083      | 1.807           | 109.510      | 107.010      | 2.125           |
| 5.003  | 29.795        | 317.0          | 375         | Circular     | 110.097      | 106.942      | 2.780           | 110.530      | 106.848      | 3.307           |
| 1.008  | 61.538        | 500.3          | 750         | Circular     | 110.530      | 106.473      | 3.307           | 109.749      | 106.350      | 2.649           |
| 6.000  | 59.288        | 20.2           | 375         | Circular     | 111.233      | 109.658      | 1.200           | 109.749      | 106.725      | 2.649           |
| 1.009  | 7.994         | 499.6          | 750         | Circular     | 109.749      | 106.334      | 2.665           | 109.623      | 106.318      | 2.555           |
| 1.010  | 9.007         | 500.4          | 750         | Circular     | 109.623      | 106.318      | 2.555           | 109.491      | 106.300      | 2.441           |
| 1.011  | 38.484        | 499.8          | 750         | Circular     | 109.491      | 106.300      | 2.441           | 108.996      | 106.223      | 2.023           |
| 1.012  | 22.517        | 500.4          | 750         | Circular     | 108.996      | 106.223      | 2.023           | 108.178      | 106.178      | 1.250           |
| 7.001  | 9.977         | 13.3           | 375         | Circular     | 105.250      | 103.750      | 1.125           | 104.500      | 103.000      | 1.125           |
| 1.013  | 17.048        | 39.9           | 450         | Circular     | 107.721      | 106.071      | 1.200           | 107.892      | 105.644      | 1.798           |
| 1.014  | 12.190        | 393.2          | 450         | Circular     | 107.892      | 105.644      | 1.798           | 106.813      | 105.613      | 0.750           |
| 1.023  | 35.078        | 21.6           | 375         | Circular     | 106.184      | 105.377      | 0.432           | 105.250      | 103.750      | 1.125           |
| 11.000 | 10.823        | 225.5          | 150         | Circular     | 105.000      | 103.925      | 0.925           | 104.950      | 103.877      | 0.923           |
| 5.002  | 21.599        | 317.6          | 375         | Circular     | 109.510      | 107.010      | 2.125           | 110.097      | 106.942      | 2.780           |
| 1.022  | 16.197        | 317.6          | 375         | Circular     | 106.739      | 105.539      | 0.825           | 106.305      | 105.488      | 0.442           |

| Link   | US<br>Node  | Dia<br>(mm) | Node<br>Type | MH<br>Type | DS<br>Node    | Dia<br>(mm) | Node<br>Type | MH<br>Type |
|--------|-------------|-------------|--------------|------------|---------------|-------------|--------------|------------|
| 2.003  | S15         | 1350        | Manhole      | Adoptable  | S16           | 1350        | Manhole      | Adoptable  |
| 2.004  | S16         | 1350        | Manhole      | Adoptable  | S21           | 1500        | Manhole      | Adoptable  |
| 7.000  | HW9         | 1350        | Manhole      | Adoptable  | BASIN A       | 1500        | Manhole      | Adoptable  |
| 1.006  | S7          | 1350        | Manhole      | Adoptable  | S9            | 1350        | Manhole      | Adoptable  |
| 4.000  | S8          | 1350        | Manhole      | Adoptable  | S9            | 1350        | Manhole      | Adoptable  |
| 1.007  | S9          | 1350        | Manhole      | Adoptable  | S21           | 1500        | Manhole      | Adoptable  |
| 5.000  | S17         | 1350        | Manhole      | Adoptable  | S18           | 1350        | Manhole      | Adoptable  |
| 5.001  | S18         | 1350        | Manhole      | Adoptable  | S19           | 1350        | Manhole      | Adoptable  |
| 5.003  | S20         | 1200        | Manhole      | Adoptable  | S21           | 1500        | Manhole      | Adoptable  |
| 1.008  | S21         | 1500        | Manhole      | Adoptable  | S32           | 1500        | Manhole      | Adoptable  |
| 6.000  | S31         | 1350        | Manhole      | Adoptable  | S32           | 1500        | Manhole      | Adoptable  |
| 1.009  | S32         | 1500        | Manhole      | Adoptable  | S33           | 1500        | Manhole      | Adoptable  |
| 1.010  | S33         | 1500        | Manhole      | Adoptable  | S35           | 1500        | Manhole      | Adoptable  |
| 1.011  | S35         | 1500        | Manhole      | Adoptable  | S26a          | 1500        | Manhole      | Adoptable  |
| 1.012  | S26a        | 1500        | Manhole      | Adoptable  | HW1           | 1500        | Manhole      | Adoptable  |
| 7.001  | BASIN A     | 1500        | Manhole      | Adoptable  | DUMMY OUTFALL | 1350        | Manhole      | Adoptable  |
| 1.013  | HW2         | 1500        | Manhole      | Adoptable  | S37           | 1500        | Manhole      | Adoptable  |
| 1.014  | S37         | 1500        | Manhole      | Adoptable  | HW3           | 1500        | Manhole      | Adoptable  |
| 1.023  | HW6         | 1500        | Manhole      | Adoptable  | BASIN A       | 1500        | Manhole      | Adoptable  |
| 11.000 | DUMMY INLET | 1200        | Manhole      | Adoptable  | HW8           | 1200        | Manhole      | Adoptable  |
| 5.002  | S19         | 1350        | Manhole      | Adoptable  | S20           | 1200        | Manhole      | Adoptable  |
| 1.022  | HW4         | 1500        | Manhole      | Adoptable  | HW5           | 1500        | Manhole      | Adoptable  |

### Manhole Schedule

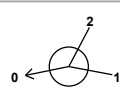
| Node | Easting<br>(m) | Northing<br>(m) | CL<br>(m) | Depth<br>(m) | Dia<br>(mm) | Connections                                                                         | Link | IL<br>(m) | Dia<br>(mm) |     |
|------|----------------|-----------------|-----------|--------------|-------------|-------------------------------------------------------------------------------------|------|-----------|-------------|-----|
| S1   | 389405.375     | 144677.663      | 114.310   | 1.628        | 1350        |    | 0    | 1.000     | 112.682     | 300 |
| S2   | 389381.399     | 144685.042      | 114.324   | 1.760        | 1350        |    | 1    | 1.000     | 112.564     | 300 |
| S3   | 389375.339     | 144681.976      | 114.211   | 1.682        | 1350        |    | 0    | 1.001     | 112.564     | 300 |
| S4   | 389357.705     | 144643.320      | 113.485   | 1.650        | 1350        |    | 1    | 1.001     | 112.529     | 300 |
| S5   | 389360.137     | 144637.697      | 113.350   | 1.800        | 1350        |    | 0    | 1.002     | 112.529     | 300 |
| S6   | 389382.584     | 144623.265      | 113.100   | 2.025        | 1350        |  | 1    | 1.002     | 111.835     | 300 |
| S12  | 389374.861     | 144603.268      | 112.620   | 2.035        | 1350        |  | 0    | 1.003     | 111.835     | 300 |
| S10  | 389328.592     | 144595.259      | 112.639   | 2.049        | 1350        |  | 1    | 1.003     | 111.700     | 300 |
| S11  | 389357.403     | 144582.270      | 112.229   | 1.771        | 1350        |  | 0    | 1.004     | 111.550     | 450 |
| S13  | 389367.024     | 144584.157      | 112.200   | 1.720        | 1350        |  | 1    | 1.004     | 111.225     | 450 |
| S14  | 389369.601     | 144579.212      | 112.100   | 2.300        | 1350        |  | 0    | 1.005     | 111.075     | 600 |
| S15  | 389407.351     | 144561.381      | 111.100   | 4.311        | 1350        |  | 1    | 3.000     | 110.585     | 300 |
| S16  | 389420.892     | 144552.001      | 110.770   | 4.014        | 1350        |  | 0    | 2.000     | 110.590     | 300 |
|      |                |                 |           |              |             |  | 1    | 2.000     | 110.458     | 300 |
|      |                |                 |           |              |             |                                                                                     | 0    | 2.001     | 110.511     | 300 |
|      |                |                 |           |              |             |                                                                                     | 1    | 3.000     | 110.480     | 300 |
|      |                |                 |           |              |             |                                                                                     | 0    | 3.001     | 110.480     | 300 |
|      |                |                 |           |              |             |                                                                                     | 1    | 3.001     | 110.100     | 300 |
|      |                |                 |           |              |             |                                                                                     | 2    | 2.001     | 110.100     | 300 |
|      |                |                 |           |              |             |                                                                                     | 0    | 2.002     | 109.800     | 600 |
|      |                |                 |           |              |             |                                                                                     | 1    | 2.002     | 106.789     | 600 |
|      |                |                 |           |              |             |                                                                                     | 0    | 2.003     | 106.789     | 600 |
|      |                |                 |           |              |             |                                                                                     | 1    | 2.003     | 106.756     | 600 |
|      |                |                 |           |              |             |                                                                                     | 0    | 2.004     | 106.756     | 600 |

### Manhole Schedule

| Node | Easting<br>(m) | Northing<br>(m) | CL<br>(m) | Depth<br>(m) | Dia<br>(mm) | Connections                                                                          | Link | IL<br>(m) | Dia<br>(mm) |     |
|------|----------------|-----------------|-----------|--------------|-------------|--------------------------------------------------------------------------------------|------|-----------|-------------|-----|
| HW8  | 389466.853     | 144207.810      | 104.950   | 1.073        | 1200        |     | 1    | 11.000    | 103.877     | 150 |
| S7   | 389457.718     | 144603.878      | 111.962   | 3.962        | 1350        |    | 1    | 1.005     | 108.000     | 600 |
|      |                |                 |           |              |             |                                                                                      | 0    | 1.006     | 108.000     | 600 |
| S8   | 389536.487     | 144638.885      | 113.579   | 2.079        | 1350        |     | 0    | 4.000     | 111.500     | 300 |
| S9   | 389508.092     | 144579.739      | 111.980   | 5.232        | 1350        |    | 1    | 4.000     | 107.048     | 300 |
|      |                |                 |           |              |             |                                                                                      | 2    | 1.006     | 106.748     | 600 |
|      |                |                 |           |              |             |                                                                                      | 0    | 1.007     | 106.748     | 600 |
| S17  | 389430.374     | 144417.713      | 108.762   | 1.425        | 1350        |     | 0    | 5.000     | 107.337     | 300 |
| S18  | 389452.840     | 144454.296      | 109.265   | 2.182        | 1350        |  | 1    | 5.000     | 107.158     | 300 |
|      |                |                 |           |              |             |                                                                                      | 0    | 5.001     | 107.083     | 375 |
| S20  | 389467.676     | 144496.302      | 110.097   | 3.155        | 1200        |   | 1    | 5.002     | 106.942     | 375 |
|      |                |                 |           |              |             |                                                                                      | 0    | 5.003     | 106.942     | 375 |
| S21  | 389480.658     | 144523.120      | 110.530   | 4.057        | 1500        |  | 1    | 5.003     | 106.848     | 375 |
|      |                |                 |           |              |             |                                                                                      | 2    | 2.004     | 106.623     | 600 |
|      |                |                 |           |              |             |                                                                                      | 3    | 1.007     | 106.623     | 600 |
|      |                |                 |           |              |             |                                                                                      | 0    | 1.008     | 106.473     | 750 |
| S31  | 389561.835     | 144550.462      | 111.233   | 1.575        | 1350        |   | 0    | 6.000     | 109.658     | 375 |
| S32  | 389536.346     | 144496.933      | 109.749   | 3.415        | 1500        |  | 1    | 6.000     | 106.725     | 375 |
|      |                |                 |           |              |             |                                                                                      | 2    | 1.008     | 106.350     | 750 |
|      |                |                 |           |              |             |                                                                                      | 0    | 1.009     | 106.334     | 750 |
| S33  | 389542.492     | 144491.821      | 109.623   | 3.305        | 1500        |  | 1    | 1.009     | 106.318     | 750 |
|      |                |                 |           |              |             |                                                                                      | 0    | 1.010     | 106.318     | 750 |
| S35  | 389543.722     | 144482.898      | 109.491   | 3.191        | 1500        |   | 1    | 1.010     | 106.300     | 750 |
|      |                |                 |           |              |             |                                                                                      | 0    | 1.011     | 106.300     | 750 |
| S26a | 389522.882     | 144450.545      | 108.996   | 2.773        | 1500        |  | 1    | 1.011     | 106.223     | 750 |
|      |                |                 |           |              |             |                                                                                      | 0    | 1.012     | 106.223     | 750 |



### Manhole Schedule

| Node        | Easting (m) | Northing (m) | CL (m)  | Depth (m) | Dia (mm) | Connections                                                                          | Link | IL (m) | Dia (mm) |     |
|-------------|-------------|--------------|---------|-----------|----------|--------------------------------------------------------------------------------------|------|--------|----------|-----|
| HW1         | 389503.290  | 144439.446   | 108.178 | 2.000     | 1500     |    | 1    | 1.012  | 106.178  | 750 |
| HW2         | 389482.642  | 144390.145   | 107.721 | 1.650     | 1500     |    | 0    | 1.013  | 106.071  | 450 |
| S37         | 389485.813  | 144373.394   | 107.892 | 2.248     | 1500     |    | 1    | 1.013  | 105.644  | 450 |
|             |             |              |         |           |          |                                                                                      | 0    | 1.014  | 105.644  | 450 |
| HW3         | 389473.960  | 144370.545   | 106.813 | 1.200     | 1500     |    | 1    | 1.014  | 105.613  | 450 |
| SWALE 2A    | 389469.668  | 144360.586   | 106.791 | 1.201     | 1500     |    |      |        |          |     |
| SWALE 2B    | 389465.777  | 144345.220   | 106.760 | 1.202     | 1500     |  |      |        |          |     |
| HW4         | 389465.977  | 144334.743   | 106.739 | 1.200     | 1500     |  | 0    | 1.022  | 105.539  | 375 |
| HW5         | 389466.708  | 144318.563   | 106.305 | 0.817     | 1500     |  | 1    | 1.022  | 105.488  | 375 |
| HW6         | 389458.106  | 144263.777   | 106.184 | 0.807     | 1500     |  | 0    | 1.023  | 105.377  | 375 |
| DUMMY INLET | 389467.044  | 144196.989   | 105.000 | 1.075     | 1200     |  | 0    | 11.000 | 103.925  | 150 |
| BASIN A     | 389441.756  | 144232.743   | 105.250 | 1.500     | 1500     |  | 1    | 7.000  | 103.750  | 300 |
|             |             |              |         |           |          |                                                                                      | 2    | 1.023  | 103.750  | 375 |
|             |             |              |         |           |          |                                                                                      | 0    | 7.001  | 103.750  | 375 |
| HW9         | 389466.743  | 144228.038   | 105.191 | 1.356     | 1350     |  | 0    | 7.000  | 103.835  | 300 |
| S19         | 389460.552  | 144475.912   | 109.510 | 2.500     | 1350     |  | 1    | 5.001  | 107.010  | 375 |
|             |             |              |         |           |          |                                                                                      | 0    | 5.002  | 107.010  | 375 |

### Manhole Schedule

| Node          | Easting (m) | Northing (m) | CL (m)  | Depth (m) | Dia (mm) | Connections                                                                              | Link  | IL (m)  | Dia (mm) |
|---------------|-------------|--------------|---------|-----------|----------|------------------------------------------------------------------------------------------|-------|---------|----------|
| DUMMY OUTFALL | 389431.980  | 144230.749   | 104.500 | 1.500     | 1350     | 1<br> | 7.001 | 103.000 | 375      |
| BASIN B       | 389474.000  | 144183.000   | 104.230 | 1.550     |          | °                                                                                        |       |         |          |

### Simulation Settings

|                      |        |                        |          |                            |     |
|----------------------|--------|------------------------|----------|----------------------------|-----|
| Rainfall Methodology | FEH-22 | Analysis Speed         | Detailed | Additional Storage (m³/ha) | 0.0 |
| Summer CV            | 1.000  | Skip Steady State      | x        | Check Discharge Rate(s)    | x   |
| Winter CV            | 1.000  | Drain Down Time (mins) | 4320     | Check Discharge Volume     | x   |

### Storm Durations

|    |     |     |     |     |      |      |
|----|-----|-----|-----|-----|------|------|
| 15 | 60  | 180 | 360 | 600 | 960  | 2160 |
| 30 | 120 | 240 | 480 | 720 | 1440 | 2880 |

| Return Period (years) | Climate Change (CC %) | Additional Area (A %) | Additional Flow (Q %) |
|-----------------------|-----------------------|-----------------------|-----------------------|
| 2                     | 0                     | 0                     | 0                     |
| 30                    | 40                    | 0                     | 0                     |
| 100                   | 45                    | 0                     | 0                     |

### Node BASIN A Online Pump Control

|                          |   |                     |         |                      |       |
|--------------------------|---|---------------------|---------|----------------------|-------|
| Flap Valve               | x | Invert Level (m)    | 103.750 | Switch off depth (m) | 1.000 |
| Replaces Downstream Link | ✓ | Switch on depth (m) | 5.000   |                      |       |

| Depth (m) | Flow (l/s) | Depth (m) | Flow (l/s) |
|-----------|------------|-----------|------------|
| 0.001     | 0.000      | 9.999     | 0.000      |

### Node BASIN B Online Pump Control

|                          |   |                     |         |                      |       |
|--------------------------|---|---------------------|---------|----------------------|-------|
| Flap Valve               | x | Invert Level (m)    | 102.680 | Switch off depth (m) | 1.000 |
| Replaces Downstream Link | ✓ | Switch on depth (m) | 5.000   |                      |       |

| Depth (m) | Flow (l/s) | Depth (m) | Flow (l/s) |
|-----------|------------|-----------|------------|
| 0.001     | 0.000      | 9.999     | 0.000      |

### Node BASIN A Depth/Area Storage Structure

|                             |         |               |      |                           |         |
|-----------------------------|---------|---------------|------|---------------------------|---------|
| Base Inf Coefficient (m/hr) | 0.08280 | Safety Factor | 10.0 | Invert Level (m)          | 103.750 |
| Side Inf Coefficient (m/hr) | 0.08280 | Porosity      | 1.00 | Time to half empty (mins) | 3360    |

| Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) |
|-----------|------------------------|----------------------------|-----------|------------------------|----------------------------|-----------|------------------------|----------------------------|-----------|------------------------|----------------------------|
| 0.000     | 2800.0                 | 2800.0                     | 0.400     | 3029.6                 | 3042.0                     | 0.800     | 3268.3                 | 3293.6                     | 1.200     | 3516.0                 | 3554.7                     |
| 0.100     | 2856.6                 | 2859.7                     | 0.500     | 3088.4                 | 3104.0                     | 0.900     | 3329.4                 | 3358.0                     | 1.300     | 3579.3                 | 3621.5                     |
| 0.200     | 2913.7                 | 2919.8                     | 0.600     | 3147.8                 | 3166.6                     | 1.000     | 3391.0                 | 3423.0                     | 1.400     | 3643.2                 | 3688.8                     |
| 0.300     | 2971.4                 | 2980.7                     | 0.700     | 3207.8                 | 3229.9                     | 1.100     | 3453.2                 | 3488.5                     | 1.500     | 3707.7                 | 3756.8                     |

#### Node HW2 Flow through Pond Storage Structure

|                             |         |                           |         |                          |        |
|-----------------------------|---------|---------------------------|---------|--------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 1.00    | Main Channel Length (m)  | 53.450 |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 106.071 | Main Channel Slope (1:X) | 500.0  |
| Safety Factor               | 10.0    | Time to half empty (mins) | 11      | Main Channel n           | 0.035  |

#### Inlets

##### HW1

| Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) |
|-----------|------------------------|----------------------------|-----------|------------------------|----------------------------|
| 0.000     | 42.0                   | 0.0                        | 1.600     | 711.0                  | 0.0                        |

#### Node HW6 Flow through Pond Storage Structure

|                             |         |                           |         |                          |        |
|-----------------------------|---------|---------------------------|---------|--------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 1.00    | Main Channel Length (m)  | 55.500 |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 105.377 | Main Channel Slope (1:X) | 500.0  |
| Safety Factor               | 10.0    | Time to half empty (mins) | 16      | Main Channel n           | 0.035  |

#### Inlets

##### HW5

| Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) |
|-----------|------------------------|----------------------------|-----------|------------------------|----------------------------|
| 0.000     | 44.0                   | 0.0                        | 1.200     | 332.0                  | 0.0                        |

#### Node HW4 Flow through Pond Storage Structure

|                             |         |                           |         |                          |       |
|-----------------------------|---------|---------------------------|---------|--------------------------|-------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 1.00    | Main Channel Length (m)  | 9.500 |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 105.539 | Main Channel Slope (1:X) | 500.0 |
| Safety Factor               | 10.0    | Time to half empty (mins) | 27      | Main Channel n           | 0.035 |

#### Inlets

##### SWALE 2B

| Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) | Depth (m) | Area (m <sup>2</sup> ) | Inf Area (m <sup>2</sup> ) |
|-----------|------------------------|----------------------------|-----------|------------------------|----------------------------|
| 0.000     | 10.0                   | 0.0                        | 1.200     | 313.0                  | 0.0                        |

#### Node SWALE 2B Flow through Pond Storage Structure

|                             |         |                           |         |                          |        |
|-----------------------------|---------|---------------------------|---------|--------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 1.00    | Main Channel Length (m)  | 15.000 |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 105.560 | Main Channel Slope (1:X) | 500.0  |
| Safety Factor               | 10.0    | Time to half empty (mins) | 25      | Main Channel n           | 0.035  |

#### Inlets

##### SWALE 2A



| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 10.0                      | 0.0                           | 1.200        | 313.0                     | 0.0                           |

#### Node SWALE 2A Flow through Pond Storage Structure

|                             |         |                           |         |                          |        |
|-----------------------------|---------|---------------------------|---------|--------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 1.00    | Main Channel Length (m)  | 11.000 |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 105.591 | Main Channel Slope (1:X) | 500.0  |
| Safety Factor               | 10.0    | Time to half empty (mins) | 23      | Main Channel n           | 0.035  |

#### Inlets HW3

| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 10.0                      | 0.0                           | 1.200        | 313.0                     | 0.0                           |

#### Node HW9 Flow through Pond Storage Structure

|                             |         |                           |         |                          |        |
|-----------------------------|---------|---------------------------|---------|--------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.00000 | Porosity                  | 1.00    | Main Channel Length (m)  | 20.000 |
| Side Inf Coefficient (m/hr) | 0.00000 | Invert Level (m)          | 103.837 | Main Channel Slope (1:X) | 500.0  |
| Safety Factor               | 10.0    | Time to half empty (mins) | 480     | Main Channel n           | 0.035  |

#### Inlets HW8

| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 18.0                      | 0.0                           | 1.100        | 230.0                     | 0.0                           |

#### Node BASIN B Depth/Area Storage Structure

|                             |         |               |      |                           |         |
|-----------------------------|---------|---------------|------|---------------------------|---------|
| Base Inf Coefficient (m/hr) | 0.08280 | Safety Factor | 10.0 | Invert Level (m)          | 102.680 |
| Side Inf Coefficient (m/hr) | 0.08280 | Porosity      | 1.00 | Time to half empty (mins) | 0       |

| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 5.0                       | 5.0                           | 1.550        | 120.0                     | 125.6                         |

**Results for 2 year Critical Storm Duration. Lowest mass balance: 99.51%**

| Node Event        | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|-------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 15 minute summer  | S1      | 10          | 112.768   | 0.086     | 13.4         | 0.1237        | 0.0000     | OK     |
| 15 minute summer  | S2      | 10          | 112.694   | 0.130     | 26.6         | 0.1859        | 0.0000     | OK     |
| 15 minute summer  | S3      | 11          | 112.637   | 0.108     | 39.5         | 0.1541        | 0.0000     | OK     |
| 15 minute summer  | S4      | 11          | 111.978   | 0.143     | 52.4         | 0.2045        | 0.0000     | OK     |
| 15 minute summer  | S5      | 11          | 111.689   | 0.139     | 65.2         | 0.1986        | 0.0000     | OK     |
| 15 minute summer  | S6      | 11          | 111.171   | 0.096     | 78.4         | 0.1368        | 0.0000     | OK     |
| 15 minute summer  | S12     | 10          | 110.650   | 0.065     | 13.4         | 0.0934        | 0.0000     | OK     |
| 15 minute summer  | S10     | 10          | 110.676   | 0.086     | 13.4         | 0.1234        | 0.0000     | OK     |
| 15 minute summer  | S11     | 10          | 110.585   | 0.127     | 26.6         | 0.1820        | 0.0000     | OK     |
| 15 minute summer  | S13     | 10          | 110.549   | 0.069     | 26.7         | 0.0985        | 0.0000     | OK     |
| 15 minute summer  | S14     | 10          | 109.876   | 0.076     | 66.3         | 0.1090        | 0.0000     | OK     |
| 15 minute summer  | S15     | 11          | 107.018   | 0.229     | 79.4         | 0.3272        | 0.0000     | OK     |
| 15 minute summer  | S16     | 11          | 106.982   | 0.226     | 89.1         | 0.3236        | 0.0000     | OK     |
| 720 minute winter | HW8     | 720         | 104.000   | 0.123     | 0.9          | 0.1387        | 0.0000     | OK     |
| 15 minute summer  | S7      | 11          | 108.119   | 0.119     | 91.3         | 0.1696        | 0.0000     | OK     |
| 15 minute summer  | S8      | 10          | 111.544   | 0.044     | 13.4         | 0.0626        | 0.0000     | OK     |
| 15 minute summer  | S9      | 12          | 107.003   | 0.255     | 116.4        | 0.3644        | 0.0000     | OK     |
| 15 minute summer  | S17     | 11          | 107.399   | 0.062     | 6.8          | 0.0882        | 0.0000     | OK     |
| 15 minute summer  | S18     | 11          | 107.192   | 0.109     | 19.5         | 0.1565        | 0.0000     | OK     |
| 15 minute summer  | S20     | 11          | 107.067   | 0.125     | 26.0         | 0.1415        | 0.0000     | OK     |
| 15 minute summer  | S21     | 12          | 106.848   | 0.375     | 240.9        | 0.6630        | 0.0000     | OK     |
| 15 minute summer  | S31     | 10          | 109.702   | 0.044     | 13.4         | 0.0633        | 0.0000     | OK     |
| 15 minute summer  | S32     | 13          | 106.778   | 0.444     | 257.2        | 0.7845        | 0.0000     | OK     |
| 15 minute summer  | S33     | 13          | 106.743   | 0.425     | 258.5        | 0.7512        | 0.0000     | OK     |
| 15 minute summer  | S35     | 13          | 106.698   | 0.398     | 266.7        | 0.7026        | 0.0000     | OK     |

| Link Event<br>(Upstream Depth) | US Node | Link              | DS Node | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|---------|-------------------|---------|---------------|----------------|----------|---------------|--------------------|
| 15 minute summer               | S1      | 1.000             | S2      | 13.2          | 0.577          | 0.185    | 0.6536        |                    |
| 15 minute summer               | S2      | 1.001             | S3      | 26.1          | 1.009          | 0.366    | 0.2178        |                    |
| 15 minute summer               | S3      | 1.002             | S4      | 39.2          | 1.411          | 0.281    | 1.2318        |                    |
| 15 minute summer               | S4      | 1.003             | S5      | 52.4          | 1.747          | 0.354    | 0.2292        |                    |
| 15 minute summer               | S5      | 1.004             | S6      | 65.6          | 1.647          | 0.190    | 1.1312        |                    |
| 15 minute summer               | S6      | 1.005             | S7      | 78.5          | 2.314          | 0.057    | 2.6427        |                    |
| 15 minute summer               | S12     | 3.000             | S13     | 13.3          | 1.139          | 0.085    | 0.0626        |                    |
| 15 minute summer               | S10     | 2.000             | S11     | 13.2          | 0.587          | 0.185    | 0.7132        |                    |
| 15 minute summer               | S11     | 2.001             | S14     | 26.3          | 2.058          | 0.115    | 0.1252        |                    |
| 15 minute summer               | S13     | 3.001             | S14     | 26.6          | 2.384          | 0.091    | 0.0624        |                    |
| 15 minute summer               | S14     | 2.002             | S15     | 66.0          | 1.262          | 0.036    | 2.4843        |                    |
| 15 minute summer               | S15     | 2.003             | S16     | 76.3          | 0.857          | 0.249    | 1.6117        |                    |
| 15 minute summer               | S16     | 2.004             | S21     | 87.8          | 0.974          | 0.287    | 6.3276        |                    |
| 720 minute winter              | HW8     | Flow through pond | HW9     | 0.9           | 0.041          | 0.000    | 4.5992        |                    |
| 15 minute summer               | S7      | 1.006             | S9      | 90.6          | 1.303          | 0.089    | 4.3492        |                    |
| 15 minute summer               | S8      | 4.000             | S9      | 13.1          | 2.078          | 0.046    | 0.4233        |                    |
| 15 minute summer               | S9      | 1.007             | S21     | 112.0         | 1.065          | 0.363    | 6.4496        |                    |
| 15 minute summer               | S17     | 5.000             | S18     | 6.5           | 0.638          | 0.091    | 0.4393        |                    |
| 15 minute summer               | S18     | 5.001             | S19     | 19.5          | 0.731          | 0.173    | 0.6151        |                    |
| 15 minute summer               | S20     | 5.003             | S21     | 25.3          | 0.844          | 0.226    | 0.8971        |                    |
| 15 minute summer               | S21     | 1.008             | S32     | 230.2         | 0.964          | 0.419    | 14.6994       |                    |
| 15 minute summer               | S31     | 6.000             | S32     | 13.1          | 1.816          | 0.029    | 0.4480        |                    |
| 15 minute summer               | S32     | 1.009             | S33     | 251.0         | 0.949          | 0.456    | 2.1139        |                    |
| 15 minute summer               | S33     | 1.010             | S35     | 259.0         | 1.048          | 0.471    | 2.2269        |                    |
| 15 minute summer               | S35     | 1.011             | S26a    | 268.3         | 1.166          | 0.488    | 8.8522        |                    |

**Results for 2 year Critical Storm Duration. Lowest mass balance: 99.51%**

| Node Event         | US Node       | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|---------------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute summer   | S26a          | 13          | 106.602   | 0.379     | 274.8        | 0.6696        | 0.0000     | OK         |
| 15 minute summer   | HW1           | 13          | 106.500   | 0.322     | 281.9        | 0.5696        | 0.0000     | OK         |
| 15 minute summer   | HW2           | 15          | 106.360   | 0.289     | 283.5        | 0.5111        | 0.0000     | OK         |
| 30 minute summer   | S37           | 23          | 106.146   | 0.501     | 272.9        | 0.8861        | 0.0000     | SURCHARGED |
| 30 minute summer   | HW3           | 27          | 106.003   | 0.390     | 277.8        | 0.6899        | 0.0000     | OK         |
| 30 minute summer   | SWALE 2A      | 27          | 106.003   | 0.413     | 261.7        | 0.7298        | 0.0000     | OK         |
| 30 minute summer   | SWALE 2B      | 27          | 106.002   | 0.444     | 220.6        | 0.7846        | 0.0000     | OK         |
| 30 minute summer   | HW4           | 27          | 106.002   | 0.463     | 176.5        | 0.8178        | 0.0000     | SURCHARGED |
| 15 minute summer   | HW5           | 19          | 105.881   | 0.393     | 137.4        | 0.6951        | 0.0000     | OK         |
| 15 minute summer   | HW6           | 19          | 105.871   | 0.493     | 163.6        | 0.8720        | 0.0000     | SURCHARGED |
| 720 minute winter  | DUMMY INLET   | 720         | 104.000   | 0.075     | 0.0          | 0.0844        | 0.0000     | OK         |
| 720 minute winter  | BASIN A       | 720         | 104.000   | 0.250     | 52.7         | 717.0853      | 0.0000     | OK         |
| 720 minute winter  | HW9           | 720         | 104.000   | 0.165     | 1.9          | 0.2356        | 0.0000     | OK         |
| 15 minute summer   | S19           | 11          | 107.120   | 0.110     | 19.5         | 0.1575        | 0.0000     | OK         |
| 15 minute summer   | DUMMY OUTFALL | 1           | 103.000   | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 1440 minute winter | BASIN B       | 1320        | 103.077   | 0.397     | 0.3          | 7.8412        | 0.0000     | OK         |

| Link Event<br>(Upstream Depth) | US Node     | Link              | DS Node       | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|-------------|-------------------|---------------|---------------|----------------|----------|---------------|--------------------|
| 15 minute summer               | S26a        | 1.012             | HW1           | 275.4         | 1.364          | 0.501    | 4.5472        |                    |
| 15 minute summer               | HW1         | Flow through pond | HW2           | 278.4         | 0.493          | 0.016    | 32.0290       |                    |
| 15 minute summer               | HW2         | 1.013             | S37           | 265.7         | 1.983          | 0.518    | 2.2603        |                    |
| 30 minute summer               | S37         | 1.014             | HW3           | 273.1         | 1.876          | 1.685    | 1.8449        |                    |
| 30 minute summer               | HW3         | Flow through pond | SWALE 2A      | 257.0         | 0.210          | 0.024    | 24.4015       |                    |
| 30 minute summer               | SWALE 2A    | Flow through pond | SWALE 2B      | 215.9         | 0.228          | 0.026    | 27.4222       |                    |
| 30 minute summer               | SWALE 2B    | Flow through pond | HW4           | 173.7         | 0.099          | 0.014    | 30.5721       |                    |
| 30 minute summer               | HW4         | 1.022             | HW5           | 171.2         | 1.560          | 1.533    | 1.7418        |                    |
| 15 minute summer               | HW5         | Flow through pond | HW6           | 163.6         | 0.426          | 0.067    | 43.5500       |                    |
| 15 minute summer               | HW6         | 1.023             | BASIN A       | 226.3         | 4.765          | 0.523    | 2.0058        |                    |
| 720 minute winter              | DUMMY INLET | 11.000            | HW8           | 0.0           | -0.008         | -0.002   | 0.1307        |                    |
| 720 minute winter              | BASIN A     | Pump              | DUMMY OUTFALL | 0.0           |                |          |               | 0.0                |
| 720 minute winter              | BASIN A     | Infiltration      |               | 6.8           |                |          |               |                    |
| 720 minute winter              | HW9         | 7.000             | BASIN A       | 1.9           | 0.490          | 0.023    | 0.8178        |                    |
| 15 minute summer               | S19         | 5.002             | S20           | 19.5          | 0.660          | 0.174    | 0.6379        |                    |
| 1440 minute winter             | BASIN B     | Pump              |               | 0.0           |                |          |               | 0.0                |
| 1440 minute winter             | BASIN B     | Infiltration      |               | 0.1           |                |          |               |                    |

**Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.51%**

| Node Event         | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute summer   | S1      | 11          | 113.337   | 0.655     | 49.1         | 0.9374        | 0.0000     | SURCHARGED |
| 15 minute summer   | S2      | 11          | 113.276   | 0.712     | 93.8         | 1.0188        | 0.0000     | SURCHARGED |
| 15 minute summer   | S3      | 11          | 113.174   | 0.645     | 137.6        | 0.9234        | 0.0000     | SURCHARGED |
| 15 minute summer   | S4      | 11          | 112.377   | 0.542     | 183.5        | 0.7750        | 0.0000     | SURCHARGED |
| 15 minute summer   | S5      | 11          | 111.847   | 0.297     | 230.1        | 0.4251        | 0.0000     | OK         |
| 15 minute summer   | S6      | 11          | 111.254   | 0.179     | 276.6        | 0.2558        | 0.0000     | OK         |
| 15 minute summer   | S12     | 10          | 110.729   | 0.144     | 49.1         | 0.2063        | 0.0000     | OK         |
| 15 minute summer   | S10     | 10          | 110.784   | 0.194     | 49.1         | 0.2770        | 0.0000     | OK         |
| 15 minute summer   | S11     | 10          | 110.672   | 0.214     | 97.6         | 0.3059        | 0.0000     | OK         |
| 15 minute summer   | S13     | 10          | 110.632   | 0.152     | 98.0         | 0.2171        | 0.0000     | OK         |
| 15 minute summer   | S14     | 10          | 109.944   | 0.144     | 243.7        | 0.2058        | 0.0000     | OK         |
| 15 minute summer   | S15     | 12          | 108.247   | 1.458     | 292.1        | 2.0865        | 0.0000     | SURCHARGED |
| 15 minute summer   | S16     | 12          | 108.202   | 1.446     | 293.7        | 2.0696        | 0.0000     | SURCHARGED |
| 2160 minute winter | HW8     | 2100        | 104.533   | 0.656     | 1.0          | 0.7418        | 0.0000     | OK         |
| 15 minute summer   | S7      | 12          | 108.271   | 0.271     | 323.2        | 0.3875        | 0.0000     | OK         |
| 15 minute summer   | S8      | 10          | 111.583   | 0.083     | 49.1         | 0.1188        | 0.0000     | OK         |
| 15 minute summer   | S9      | 12          | 108.242   | 1.494     | 409.8        | 2.1378        | 0.0000     | SURCHARGED |
| 15 minute summer   | S17     | 11          | 108.386   | 1.049     | 31.3         | 1.5014        | 0.0000     | SURCHARGED |
| 15 minute summer   | S18     | 12          | 108.141   | 1.058     | 73.5         | 1.5136        | 0.0000     | SURCHARGED |
| 15 minute summer   | S20     | 12          | 108.118   | 1.176     | 85.4         | 1.3304        | 0.0000     | SURCHARGED |
| 15 minute summer   | S21     | 12          | 108.053   | 1.580     | 763.5        | 2.7923        | 0.0000     | SURCHARGED |
| 15 minute summer   | S31     | 10          | 109.741   | 0.083     | 49.1         | 0.1184        | 0.0000     | OK         |
| 15 minute summer   | S32     | 12          | 107.748   | 1.414     | 860.8        | 2.4977        | 0.0000     | SURCHARGED |
| 15 minute summer   | S33     | 12          | 107.611   | 1.293     | 903.6        | 2.2841        | 0.0000     | SURCHARGED |
| 30 minute summer   | S35     | 20          | 107.462   | 1.162     | 897.3        | 2.0534        | 0.0000     | SURCHARGED |

| Link Event<br>(Upstream Depth) | US Node | Link              | DS Node | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|---------|-------------------|---------|---------------|----------------|----------|---------------|--------------------|
| 15 minute summer               | S1      | 1.000             | S2      | 45.2          | 0.692          | 0.633    | 2.0012        |                    |
| 15 minute summer               | S2      | 1.001             | S3      | 90.9          | 1.290          | 1.272    | 0.5913        |                    |
| 15 minute summer               | S3      | 1.002             | S4      | 136.7         | 1.942          | 0.980    | 3.1084        |                    |
| 15 minute summer               | S4      | 1.003             | S5      | 183.3         | 2.603          | 1.239    | 0.5326        |                    |
| 15 minute summer               | S5      | 1.004             | S6      | 229.8         | 2.220          | 0.664    | 2.9394        |                    |
| 15 minute summer               | S6      | 1.005             | S7      | 276.4         | 3.301          | 0.201    | 7.3945        |                    |
| 15 minute summer               | S12     | 3.000             | S13     | 48.9          | 1.414          | 0.313    | 0.1849        |                    |
| 15 minute summer               | S10     | 2.000             | S11     | 48.5          | 0.952          | 0.679    | 1.6081        |                    |
| 15 minute summer               | S11     | 2.001             | S14     | 96.9          | 2.800          | 0.424    | 0.3392        |                    |
| 15 minute summer               | S13     | 3.001             | S14     | 97.7          | 3.174          | 0.335    | 0.1718        |                    |
| 15 minute summer               | S14     | 2.002             | S15     | 243.0         | 1.588          | 0.131    | 6.9609        |                    |
| 15 minute summer               | S15     | 2.003             | S16     | 246.9         | 1.045          | 0.806    | 4.6401        |                    |
| 15 minute summer               | S16     | 2.004             | S21     | 298.1         | 1.063          | 0.974    | 18.6972       |                    |
| 2160 minute winter             | HW8     | Flow through pond | HW9     | 0.5           | 0.027          | 0.000    | 56.2328       |                    |
| 15 minute summer               | S7      | 1.006             | S9      | 315.9         | 1.591          | 0.310    | 11.5956       |                    |
| 15 minute summer               | S8      | 4.000             | S9      | 48.7          | 2.716          | 0.170    | 2.8997        |                    |
| 15 minute summer               | S9      | 1.007             | S21     | 377.8         | 1.341          | 1.223    | 17.2682       |                    |
| 15 minute summer               | S17     | 5.000             | S18     | 32.8          | 0.771          | 0.459    | 3.0232        |                    |
| 15 minute summer               | S18     | 5.001             | S19     | 71.1          | 0.946          | 0.633    | 2.5314        |                    |
| 15 minute summer               | S20     | 5.003             | S21     | 83.4          | 0.946          | 0.746    | 3.2863        |                    |
| 15 minute summer               | S21     | 1.008             | S32     | 763.0         | 1.734          | 1.388    | 27.0841       |                    |
| 15 minute summer               | S31     | 6.000             | S32     | 48.7          | 2.060          | 0.109    | 3.8031        |                    |
| 15 minute summer               | S32     | 1.009             | S33     | 865.1         | 1.966          | 1.573    | 3.5183        |                    |
| 15 minute summer               | S33     | 1.010             | S35     | 904.5         | 2.055          | 1.646    | 3.9642        |                    |
| 30 minute summer               | S35     | 1.011             | S26a    | 890.6         | 2.024          | 1.620    | 16.9376       |                    |



**Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.51%**

| Node Event         | US Node       | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|---------------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 30 minute summer   | S26a          | 21          | 107.212   | 0.989     | 931.6        | 1.7468        | 0.0000     | SURCHARGED |
| 30 minute summer   | HW1           | 24          | 107.133   | 0.955     | 964.5        | 1.6879        | 0.0000     | OK         |
| 30 minute summer   | HW2           | 24          | 107.134   | 1.063     | 701.0        | 1.8776        | 0.0000     | SURCHARGED |
| 30 minute winter   | S37           | 29          | 106.732   | 1.088     | 401.4        | 1.9225        | 0.0000     | SURCHARGED |
| 30 minute winter   | HW3           | 36          | 106.476   | 0.863     | 423.0        | 1.5247        | 0.0000     | OK         |
| 30 minute winter   | SWALE 2A      | 36          | 106.476   | 0.886     | 396.0        | 1.5652        | 0.0000     | OK         |
| 30 minute winter   | SWALE 2B      | 36          | 106.476   | 0.918     | 328.2        | 1.6216        | 0.0000     | OK         |
| 30 minute winter   | HW4           | 36          | 106.476   | 0.937     | 303.8        | 1.6551        | 0.0000     | FLOOD RISK |
| 15 minute winter   | HW5           | 18          | 106.089   | 0.601     | 286.6        | 1.0611        | 0.0000     | OK         |
| 15 minute winter   | HW6           | 17          | 106.083   | 0.706     | 299.4        | 1.2475        | 0.0000     | FLOOD RISK |
| 2160 minute winter | DUMMY INLET   | 2100        | 104.533   | 0.608     | 0.0          | 0.6875        | 0.0000     | SURCHARGED |
| 2160 minute winter | BASIN A       | 2100        | 104.533   | 0.783     | 61.9         | 2370.5330     | 0.0000     | SURCHARGED |
| 2160 minute winter | HW9           | 2100        | 104.533   | 0.698     | 1.5          | 0.9987        | 0.0000     | SURCHARGED |
| 15 minute summer   | S19           | 12          | 108.138   | 1.128     | 71.1         | 1.6144        | 0.0000     | SURCHARGED |
| 15 minute summer   | DUMMY OUTFALL | 1           | 103.000   | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 2880 minute summer | BASIN B       | 1980        | 103.371   | 0.690     | 0.7          | 21.1376       | 0.0000     | OK         |

| Link Event (Upstream Depth) | US Node     | Link              | DS Node       | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|-----------------------------|-------------|-------------------|---------------|---------------|----------------|----------|---------------|--------------------|
| 30 minute summer            | S26a        | 1.012             | HW1           | 923.5         | 2.100          | 1.681    | 9.9102        |                    |
| 30 minute summer            | HW1         | Flow through pond | HW2           | 668.2         | 0.491          | 0.039    | 256.0181      |                    |
| 30 minute summer            | HW2         | 1.013             | S37           | 400.0         | 2.525          | 0.780    | 2.7011        |                    |
| 30 minute winter            | S37         | 1.014             | HW3           | 400.6         | 2.529          | 2.472    | 1.9314        |                    |
| 30 minute winter            | HW3         | Flow through pond | SWALE 2A      | 373.4         | 0.246          | 0.034    | 105.2262      |                    |
| 30 minute winter            | SWALE 2A    | Flow through pond | SWALE 2B      | 319.2         | 0.262          | 0.039    | 111.5296      |                    |
| 30 minute winter            | SWALE 2B    | Flow through pond | HW4           | 303.8         | 0.106          | 0.024    | 117.9340      |                    |
| 30 minute winter            | HW4         | 1.022             | HW5           | 310.3         | 2.814          | 2.779    | 1.7865        |                    |
| 15 minute winter            | HW5         | Flow through pond | HW6           | 299.4         | 0.591          | 0.122    | 80.4455       |                    |
| 15 minute winter            | HW6         | 1.023             | BASIN A       | 349.7         | 4.808          | 0.808    | 2.5150        |                    |
| 2160 minute winter          | DUMMY INLET | 11.000            | HW8           | 0.0           | -0.004         | 0.003    | 0.1905        |                    |
| 2160 minute winter          | BASIN A     | Pump              | DUMMY OUTFALL | 0.0           |                |          |               | 0.0                |
| 2160 minute winter          | BASIN A     | Infiltration      |               | 7.6           |                |          |               |                    |
| 2160 minute winter          | HW9         | 7.000             | BASIN A       | 1.0           | 0.414          | 0.013    | 1.1267        |                    |
| 15 minute summer            | S19         | 5.002             | S20           | 65.9          | 0.813          | 0.590    | 2.3823        |                    |
| 2880 minute summer          | BASIN B     | Pump              |               | 0.0           |                |          |               | 0.0                |
| 2880 minute summer          | BASIN B     | Infiltration      |               | 0.1           |                |          |               |                    |

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.51%**

| Node Event         | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute summer   | S1      | 11          | 114.252   | 1.570     | 64.6         | 2.2470        | 0.0000     | FLOOD RISK |
| 15 minute summer   | S2      | 11          | 114.150   | 1.586     | 120.4        | 2.2694        | 0.0000     | FLOOD RISK |
| 15 minute summer   | S3      | 11          | 113.980   | 1.451     | 179.3        | 2.0757        | 0.0000     | FLOOD RISK |
| 15 minute summer   | S4      | 11          | 112.645   | 0.810     | 238.4        | 1.1595        | 0.0000     | SURCHARGED |
| 15 minute summer   | S5      | 11          | 111.917   | 0.367     | 299.5        | 0.5247        | 0.0000     | OK         |
| 15 minute summer   | S6      | 11          | 111.280   | 0.205     | 360.6        | 0.2936        | 0.0000     | OK         |
| 15 minute summer   | S12     | 10          | 110.761   | 0.176     | 64.6         | 0.2513        | 0.0000     | OK         |
| 15 minute summer   | S10     | 10          | 110.833   | 0.243     | 64.6         | 0.3481        | 0.0000     | OK         |
| 15 minute summer   | S11     | 10          | 110.706   | 0.248     | 128.3        | 0.3546        | 0.0000     | OK         |
| 15 minute summer   | S13     | 10          | 110.664   | 0.184     | 129.0        | 0.2632        | 0.0000     | OK         |
| 15 minute summer   | S14     | 10          | 109.965   | 0.165     | 320.6        | 0.2363        | 0.0000     | OK         |
| 15 minute summer   | S15     | 12          | 109.098   | 2.309     | 384.4        | 3.3039        | 0.0000     | SURCHARGED |
| 15 minute summer   | S16     | 12          | 109.038   | 2.282     | 420.0        | 3.2659        | 0.0000     | SURCHARGED |
| 2160 minute winter | HW8     | 2160        | 104.820   | 0.943     | 1.5          | 1.0664        | 0.0000     | OK         |
| 15 minute summer   | S7      | 12          | 109.412   | 1.412     | 421.9        | 2.0200        | 0.0000     | SURCHARGED |
| 15 minute summer   | S8      | 10          | 111.596   | 0.096     | 64.6         | 0.1369        | 0.0000     | OK         |
| 15 minute summer   | S9      | 12          | 109.187   | 2.439     | 473.6        | 3.4906        | 0.0000     | SURCHARGED |
| 15 minute summer   | S17     | 11          | 108.762   | 1.425     | 44.0         | 2.0392        | 5.0638     | FLOOD      |
| 15 minute summer   | S18     | 12          | 108.808   | 1.725     | 91.0         | 2.4689        | 0.0000     | SURCHARGED |
| 15 minute summer   | S20     | 12          | 108.835   | 1.893     | 112.4        | 2.1411        | 0.0000     | SURCHARGED |
| 15 minute summer   | S21     | 12          | 108.831   | 2.358     | 944.6        | 4.1659        | 0.0000     | SURCHARGED |
| 15 minute summer   | S31     | 10          | 109.753   | 0.095     | 64.6         | 0.1359        | 0.0000     | OK         |
| 30 minute summer   | S32     | 20          | 108.368   | 2.034     | 1034.1       | 3.5942        | 0.0000     | SURCHARGED |
| 30 minute summer   | S33     | 20          | 108.180   | 1.862     | 1061.3       | 3.2902        | 0.0000     | SURCHARGED |
| 30 minute summer   | S35     | 20          | 107.969   | 1.668     | 1105.2       | 2.9482        | 0.0000     | SURCHARGED |

| Link Event<br>(Upstream Depth) | US Node | Link              | DS Node | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|---------|-------------------|---------|---------------|----------------|----------|---------------|--------------------|
| 15 minute summer               | S1      | 1.000             | S2      | 58.8          | 0.835          | 0.823    | 2.0012        |                    |
| 15 minute summer               | S2      | 1.001             | S3      | 117.7         | 1.671          | 1.648    | 0.5913        |                    |
| 15 minute summer               | S3      | 1.002             | S4      | 176.8         | 2.511          | 1.267    | 3.1084        |                    |
| 15 minute summer               | S4      | 1.003             | S5      | 237.9         | 3.379          | 1.607    | 0.5325        |                    |
| 15 minute summer               | S5      | 1.004             | S6      | 299.0         | 2.323          | 0.864    | 3.6462        |                    |
| 15 minute summer               | S6      | 1.005             | S7      | 360.4         | 3.393          | 0.262    | 14.2299       |                    |
| 15 minute summer               | S12     | 3.000             | S13     | 64.4          | 1.461          | 0.412    | 0.2354        |                    |
| 15 minute summer               | S10     | 2.000             | S11     | 63.7          | 1.033          | 0.892    | 1.9505        |                    |
| 15 minute summer               | S11     | 2.001             | S14     | 127.5         | 2.954          | 0.558    | 0.4225        |                    |
| 15 minute summer               | S13     | 3.001             | S14     | 128.6         | 3.338          | 0.441    | 0.2146        |                    |
| 15 minute summer               | S14     | 2.002             | S15     | 319.8         | 1.665          | 0.172    | 7.1943        |                    |
| 15 minute summer               | S15     | 2.003             | S16     | 358.4         | 1.272          | 1.170    | 4.6401        |                    |
| 15 minute summer               | S16     | 2.004             | S21     | 412.9         | 1.466          | 1.349    | 18.6972       |                    |
| 2160 minute winter             | HW8     | Flow through pond | HW9     | 0.5           | 0.030          | 0.000    | 106.6561      |                    |
| 15 minute summer               | S7      | 1.006             | S9      | 384.6         | 1.610          | 0.377    | 16.1255       |                    |
| 15 minute summer               | S8      | 4.000             | S9      | 64.2          | 2.557          | 0.223    | 3.0160        |                    |
| 15 minute summer               | S9      | 1.007             | S21     | 486.6         | 1.728          | 1.575    | 17.2682       |                    |
| 15 minute summer               | S17     | 5.000             | S18     | 29.4          | 0.771          | 0.412    | 3.0232        |                    |
| 15 minute summer               | S18     | 5.001             | S19     | 92.6          | 0.958          | 0.825    | 2.5314        |                    |
| 15 minute summer               | S20     | 5.003             | S21     | 104.1         | 0.961          | 0.931    | 3.2863        |                    |
| 15 minute summer               | S21     | 1.008             | S32     | 941.9         | 2.140          | 1.714    | 27.0841       |                    |
| 15 minute summer               | S31     | 6.000             | S32     | 64.2          | 2.050          | 0.144    | 3.9188        |                    |
| 30 minute summer               | S32     | 1.009             | S33     | 1018.0        | 2.313          | 1.851    | 3.5183        |                    |
| 30 minute summer               | S33     | 1.010             | S35     | 1061.9        | 2.413          | 1.932    | 3.9642        |                    |
| 30 minute summer               | S35     | 1.011             | S26a    | 1105.2        | 2.511          | 2.010    | 16.9376       |                    |

**Results for 100 year +45% CC Critical Storm Duration. Lowest mass balance: 99.51%**

| Node Event         | US Node       | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|---------------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 30 minute summer   | S26a          | 21          | 107.544   | 1.321     | 1149.9       | 2.3347        | 0.0000     | SURCHARGED |
| 30 minute summer   | HW1           | 25          | 107.419   | 1.241     | 1199.1       | 2.1922        | 0.0000     | OK         |
| 30 minute summer   | HW2           | 25          | 107.419   | 1.348     | 823.5        | 2.3825        | 0.0000     | SURCHARGED |
| 30 minute winter   | S37           | 29          | 106.936   | 1.292     | 443.7        | 2.2822        | 0.0000     | SURCHARGED |
| 60 minute winter   | HW3           | 60          | 106.617   | 1.004     | 446.8        | 1.7747        | 0.0000     | OK         |
| 60 minute winter   | SWALE 2A      | 60          | 106.617   | 1.027     | 431.5        | 1.8153        | 0.0000     | OK         |
| 60 minute winter   | SWALE 2B      | 60          | 106.617   | 1.059     | 387.5        | 1.8718        | 0.0000     | OK         |
| 60 minute winter   | HW4           | 60          | 106.617   | 1.078     | 350.6        | 1.9053        | 0.0000     | FLOOD RISK |
| 15 minute winter   | HW5           | 17          | 106.147   | 0.659     | 310.8        | 1.1638        | 0.0000     | OK         |
| 15 minute winter   | HW6           | 17          | 106.142   | 0.765     | 322.7        | 1.3520        | 0.0000     | FLOOD RISK |
| 2160 minute winter | DUMMY INLET   | 2160        | 104.820   | 0.895     | 0.0          | 1.0119        | 0.0000     | FLOOD RISK |
| 2160 minute winter | BASIN A       | 2160        | 104.820   | 1.070     | 81.9         | 3331.1890     | 0.0000     | SURCHARGED |
| 2160 minute winter | HW9           | 2160        | 104.820   | 0.985     | 1.9          | 1.4094        | 0.0000     | SURCHARGED |
| 15 minute summer   | S19           | 12          | 108.823   | 1.813     | 129.9        | 2.5948        | 0.0000     | SURCHARGED |
| 15 minute summer   | DUMMY OUTFALL | 1           | 103.000   | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 1440 minute summer | BASIN B       | 1350        | 103.496   | 0.816     | 1.6          | 28.7910       | 0.0000     | OK         |

| Link Event (Upstream Depth) | US Node     | Link              | DS Node       | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|-----------------------------|-------------|-------------------|---------------|---------------|----------------|----------|---------------|--------------------|
| 30 minute summer            | S26a        | 1.012             | HW1           | 1146.9        | 2.606          | 2.087    | 9.9102        |                    |
| 30 minute summer            | HW1         | Flow through pond | HW2           | 780.2         | 0.477          | 0.045    | 405.6173      |                    |
| 30 minute summer            | HW2         | 1.013             | S37           | 436.3         | 2.754          | 0.851    | 2.7011        |                    |
| 30 minute winter            | S37         | 1.014             | HW3           | 443.0         | 2.796          | 2.734    | 1.9314        |                    |
| 60 minute winter            | HW3         | Flow through pond | SWALE 2A      | 409.2         | 0.231          | 0.038    | 140.3909      |                    |
| 60 minute winter            | SWALE 2A    | Flow through pond | SWALE 2B      | 370.5         | 0.254          | 0.045    | 147.6823      |                    |
| 60 minute winter            | SWALE 2B    | Flow through pond | HW4           | 342.0         | 0.108          | 0.027    | 155.0428      |                    |
| 60 minute winter            | HW4         | 1.022             | HW5           | 338.8         | 3.072          | 3.034    | 1.7865        |                    |
| 15 minute winter            | HW5         | Flow through pond | HW6           | 322.7         | 0.613          | 0.131    | 92.6941       |                    |
| 15 minute winter            | HW6         | 1.023             | BASIN A       | 371.7         | 4.661          | 0.859    | 2.7590        |                    |
| 2160 minute winter          | DUMMY INLET | 11.000            | HW8           | 0.0           | -0.005         | -0.003   | 0.1905        |                    |
| 2160 minute winter          | BASIN A     | Pump              | DUMMY OUTFALL | 0.0           |                |          |               | 0.0                |
| 2160 minute winter          | BASIN A     | Infiltration      |               | 8.0           |                |          |               |                    |
| 2160 minute winter          | HW9         | 7.000             | BASIN A       | 1.1           | 0.504          | 0.014    | 1.1267        |                    |
| 15 minute summer            | S19         | 5.002             | S20           | 81.2          | 0.794          | 0.727    | 2.3823        |                    |
| 1440 minute summer          | BASIN B     | Pump              |               | 0.0           |                |          |               | 0.0                |
| 1440 minute summer          | BASIN B     | Infiltration      |               | 0.2           |                |          |               |                    |

### Simulation Settings

|                      |          |                            |          |                         |   |
|----------------------|----------|----------------------------|----------|-------------------------|---|
| Rainfall Methodology | FEH-22   | Analysis Speed             | Detailed | Starting Level (m)      |   |
| Rainfall Events      | Singular | Skip Steady State          | x        | Check Discharge Rate(s) | x |
| Summer CV            | 1.000    | Drain Down Time (mins)     | 4320     | Check Discharge Volume  | x |
| Winter CV            | 1.000    | Additional Storage (m³/ha) | 0.0      |                         |   |

### Storm Durations

|    |     |     |     |     |      |      |
|----|-----|-----|-----|-----|------|------|
| 15 | 60  | 180 | 360 | 600 | 960  | 2160 |
| 30 | 120 | 240 | 480 | 720 | 1440 | 2880 |

| Return Period<br>(years) | Climate Change<br>(CC %) | Additional Area<br>(A %) | Additional Flow<br>(Q %) |
|--------------------------|--------------------------|--------------------------|--------------------------|
| 10                       | 0                        | 0                        | 0                        |
| 30                       | 40                       | 0                        | 0                        |

### Node BASIN A Online Pump Control

|                          |   |                     |         |                      |       |
|--------------------------|---|---------------------|---------|----------------------|-------|
| Flap Valve               | x | Invert Level (m)    | 103.750 | Switch off depth (m) | 1.000 |
| Replaces Downstream Link | ✓ | Switch on depth (m) | 5.000   |                      |       |

| Depth<br>(m) | Flow<br>(l/s) | Depth<br>(m) | Flow<br>(l/s) |
|--------------|---------------|--------------|---------------|
| 0.001        | 0.000         | 9.999        | 0.000         |

### Node BASIN B Online Pump Control

|                          |   |                     |         |                      |       |
|--------------------------|---|---------------------|---------|----------------------|-------|
| Flap Valve               | x | Invert Level (m)    | 102.680 | Switch off depth (m) | 1.000 |
| Replaces Downstream Link | ✓ | Switch on depth (m) | 5.000   |                      |       |

| Depth<br>(m) | Flow<br>(l/s) | Depth<br>(m) | Flow<br>(l/s) |
|--------------|---------------|--------------|---------------|
| 0.001        | 0.000         | 9.999        | 0.000         |

### Node BASIN A Depth/Area Storage Structure

|                             |         |               |      |                           |         |
|-----------------------------|---------|---------------|------|---------------------------|---------|
| Base Inf Coefficient (m/hr) | 0.05120 | Safety Factor | 10.0 | Invert Level (m)          | 103.750 |
| Side Inf Coefficient (m/hr) | 0.05120 | Porosity      | 1.00 | Time to half empty (mins) | 2880    |

| Depth<br>(m) | Area<br>(m²) | Inf Area<br>(m²) | Depth<br>(m) | Area<br>(m²) | Inf Area<br>(m²) | Depth<br>(m) | Area<br>(m²) | Inf Area<br>(m²) | Depth<br>(m) | Area<br>(m²) | Inf Area<br>(m²) |
|--------------|--------------|------------------|--------------|--------------|------------------|--------------|--------------|------------------|--------------|--------------|------------------|
| 0.000        | 2800.0       | 2800.0           | 0.400        | 3029.6       | 3042.0           | 0.800        | 3268.3       | 3293.6           | 1.200        | 3516.0       | 3554.7           |
| 0.100        | 2856.6       | 2859.7           | 0.500        | 3088.4       | 3104.0           | 0.900        | 3329.4       | 3358.0           | 1.300        | 3579.3       | 3621.5           |
| 0.200        | 2913.7       | 2919.8           | 0.600        | 3147.8       | 3166.6           | 1.000        | 3391.0       | 3423.0           | 1.400        | 3643.2       | 3688.8           |
| 0.300        | 2971.4       | 2980.7           | 0.700        | 3207.8       | 3229.9           | 1.100        | 3453.2       | 3488.5           | 1.500        | 3707.7       | 3756.8           |

### Node HW2 Flow through Pond Storage Structure

|                             |         |                           |         |                          |        |
|-----------------------------|---------|---------------------------|---------|--------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.05120 | Porosity                  | 1.00    | Main Channel Length (m)  | 53.450 |
| Side Inf Coefficient (m/hr) | 0.05120 | Invert Level (m)          | 106.071 | Main Channel Slope (1:X) | 500.0  |
| Safety Factor               | 10.0    | Time to half empty (mins) | 9       | Main Channel n           | 0.035  |

Inlets  
HW1



| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 42.0                      | 42.0                          | 1.600        | 711.0                     | 717.6                         |

#### Node HW6 Flow through Pond Storage Structure

|                             |         |                           |         |                          |        |
|-----------------------------|---------|---------------------------|---------|--------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.05120 | Porosity                  | 1.00    | Main Channel Length (m)  | 55.500 |
| Side Inf Coefficient (m/hr) | 0.05120 | Invert Level (m)          | 105.377 | Main Channel Slope (1:X) | 500.0  |
| Safety Factor               | 10.0    | Time to half empty (mins) | 29      | Main Channel n           | 0.035  |

#### Inlets HW5

| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 44.0                      | 44.0                          | 1.200        | 332.0                     | 336.8                         |

#### Node HW4 Flow through Pond Storage Structure

|                             |         |                           |         |                          |       |
|-----------------------------|---------|---------------------------|---------|--------------------------|-------|
| Base Inf Coefficient (m/hr) | 0.05120 | Porosity                  | 1.00    | Main Channel Length (m)  | 9.500 |
| Side Inf Coefficient (m/hr) | 0.05120 | Invert Level (m)          | 105.539 | Main Channel Slope (1:X) | 500.0 |
| Safety Factor               | 10.0    | Time to half empty (mins) | 25      | Main Channel n           | 0.035 |

#### Inlets SWALE 2B

| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 10.0                      | 10.0                          | 1.200        | 313.0                     | 316.2                         |

#### Node SWALE 2B Flow through Pond Storage Structure

|                             |         |                           |         |                          |        |
|-----------------------------|---------|---------------------------|---------|--------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.05120 | Porosity                  | 1.00    | Main Channel Length (m)  | 15.000 |
| Side Inf Coefficient (m/hr) | 0.05120 | Invert Level (m)          | 105.560 | Main Channel Slope (1:X) | 500.0  |
| Safety Factor               | 10.0    | Time to half empty (mins) | 24      | Main Channel n           | 0.035  |

#### Inlets SWALE 2A

| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 10.0                      | 10.0                          | 1.200        | 313.0                     | 316.2                         |

#### Node SWALE 2A Flow through Pond Storage Structure

|                             |         |                           |         |                          |        |
|-----------------------------|---------|---------------------------|---------|--------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.05120 | Porosity                  | 1.00    | Main Channel Length (m)  | 11.000 |
| Side Inf Coefficient (m/hr) | 0.05120 | Invert Level (m)          | 105.591 | Main Channel Slope (1:X) | 500.0  |
| Safety Factor               | 10.0    | Time to half empty (mins) | 23      | Main Channel n           | 0.035  |

#### Inlets HW3

| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 10.0                      | 10.0                          | 1.200        | 313.0                     | 316.2                         |

**Node HW9 Flow through Pond Storage Structure**

|                             |         |                           |         |                          |        |
|-----------------------------|---------|---------------------------|---------|--------------------------|--------|
| Base Inf Coefficient (m/hr) | 0.05120 | Porosity                  | 1.00    | Main Channel Length (m)  | 20.000 |
| Side Inf Coefficient (m/hr) | 0.05120 | Invert Level (m)          | 103.837 | Main Channel Slope (1:X) | 500.0  |
| Safety Factor               | 10.0    | Time to half empty (mins) | 2760    | Main Channel n           | 0.035  |

**Inlets**

HW8

| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 18.0                      | 18.0                          | 1.100        | 230.0                     | 233.4                         |

**Node BASIN B Depth/Area Storage Structure**

|                             |         |               |      |                           |         |
|-----------------------------|---------|---------------|------|---------------------------|---------|
| Base Inf Coefficient (m/hr) | 0.05120 | Safety Factor | 10.0 | Invert Level (m)          | 102.680 |
| Side Inf Coefficient (m/hr) | 0.05120 | Porosity      | 1.00 | Time to half empty (mins) | 0       |

| Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) | Depth<br>(m) | Area<br>(m <sup>2</sup> ) | Inf Area<br>(m <sup>2</sup> ) |
|--------------|---------------------------|-------------------------------|--------------|---------------------------|-------------------------------|
| 0.000        | 5.0                       | 5.0                           | 1.550        | 120.0                     | 125.6                         |

**Results for 10 year Critical Storm Duration. Lowest mass balance: 99.58%**

| Node Event         | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status |
|--------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|--------|
| 15 minute summer   | S1      | 10          | 112.808   | 0.126     | 26.9         | 0.1798        | 0.0000     | OK     |
| 15 minute summer   | S2      | 10          | 112.760   | 0.196     | 53.4         | 0.2807        | 0.0000     | OK     |
| 15 minute summer   | S3      | 10          | 112.691   | 0.162     | 79.5         | 0.2314        | 0.0000     | OK     |
| 15 minute summer   | S4      | 11          | 112.065   | 0.229     | 105.7        | 0.3284        | 0.0000     | OK     |
| 15 minute summer   | S5      | 11          | 111.757   | 0.207     | 130.9        | 0.2957        | 0.0000     | OK     |
| 15 minute summer   | S6      | 11          | 111.210   | 0.135     | 157.5        | 0.1927        | 0.0000     | OK     |
| 15 minute summer   | S12     | 10          | 110.683   | 0.098     | 26.9         | 0.1400        | 0.0000     | OK     |
| 15 minute summer   | S10     | 10          | 110.718   | 0.127     | 26.9         | 0.1824        | 0.0000     | OK     |
| 15 minute summer   | S11     | 10          | 110.621   | 0.163     | 53.4         | 0.2335        | 0.0000     | OK     |
| 15 minute summer   | S13     | 10          | 110.583   | 0.103     | 53.7         | 0.1478        | 0.0000     | OK     |
| 15 minute summer   | S14     | 10          | 109.907   | 0.107     | 133.3        | 0.1528        | 0.0000     | OK     |
| 15 minute summer   | S15     | 11          | 107.144   | 0.355     | 159.7        | 0.5083        | 0.0000     | OK     |
| 15 minute summer   | S16     | 12          | 107.126   | 0.370     | 180.8        | 0.5295        | 0.0000     | OK     |
| 2160 minute summer | HW8     | 2040        | 104.222   | 0.345     | 0.8          | 0.3897        | 0.0000     | OK     |
| 15 minute summer   | S7      | 11          | 108.169   | 0.169     | 183.5        | 0.2415        | 0.0000     | OK     |
| 15 minute summer   | S8      | 10          | 111.562   | 0.062     | 26.9         | 0.0882        | 0.0000     | OK     |
| 15 minute summer   | S9      | 12          | 107.169   | 0.421     | 235.0        | 0.6021        | 0.0000     | OK     |
| 15 minute summer   | S17     | 10          | 107.426   | 0.089     | 13.6         | 0.1278        | 0.0000     | OK     |
| 15 minute summer   | S18     | 11          | 107.247   | 0.164     | 40.2         | 0.2343        | 0.0000     | OK     |
| 15 minute summer   | S20     | 12          | 107.132   | 0.190     | 52.4         | 0.2149        | 0.0000     | OK     |
| 15 minute summer   | S21     | 12          | 107.103   | 0.630     | 479.7        | 1.1123        | 0.0000     | OK     |
| 15 minute summer   | S31     | 10          | 109.720   | 0.062     | 26.9         | 0.0881        | 0.0000     | OK     |
| 15 minute summer   | S32     | 12          | 107.017   | 0.683     | 487.0        | 1.2061        | 0.0000     | OK     |
| 15 minute summer   | S33     | 12          | 106.967   | 0.648     | 503.1        | 1.1458        | 0.0000     | OK     |
| 15 minute summer   | S35     | 12          | 106.900   | 0.600     | 523.1        | 1.0596        | 0.0000     | OK     |

| Link Event<br>(Upstream Depth) | US Node | Link              | DS Node | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|---------|-------------------|---------|---------------|----------------|----------|---------------|--------------------|
| 15 minute summer               | S1      | 1.000             | S2      | 26.5          | 0.688          | 0.371    | 1.0907        |                    |
| 15 minute summer               | S2      | 1.001             | S3      | 52.7          | 1.211          | 0.737    | 0.3674        |                    |
| 15 minute summer               | S3      | 1.002             | S4      | 78.8          | 1.627          | 0.565    | 2.1229        |                    |
| 15 minute summer               | S4      | 1.003             | S5      | 105.3         | 2.031          | 0.712    | 0.3947        |                    |
| 15 minute summer               | S5      | 1.004             | S6      | 131.9         | 1.965          | 0.381    | 1.9066        |                    |
| 15 minute summer               | S6      | 1.005             | S7      | 157.9         | 2.832          | 0.115    | 4.3469        |                    |
| 15 minute summer               | S12     | 3.000             | S13     | 26.8          | 1.295          | 0.172    | 0.1106        |                    |
| 15 minute summer               | S10     | 2.000             | S11     | 26.5          | 0.784          | 0.371    | 1.0691        |                    |
| 15 minute summer               | S11     | 2.001             | S14     | 52.9          | 2.448          | 0.232    | 0.2121        |                    |
| 15 minute summer               | S13     | 3.001             | S14     | 53.5          | 2.803          | 0.184    | 0.1066        |                    |
| 15 minute summer               | S14     | 2.002             | S15     | 132.8         | 1.451          | 0.072    | 4.3197        |                    |
| 15 minute summer               | S15     | 2.003             | S16     | 153.9         | 0.955          | 0.503    | 2.9328        |                    |
| 15 minute summer               | S16     | 2.004             | S21     | 171.8         | 1.066          | 0.561    | 14.0659       |                    |
| 2160 minute summer             | HW8     | Flow through Pond | HW9     | 0.5           | 0.029          | 0.000    | 19.4395       |                    |
| 15 minute summer               | S7      | 1.006             | S9      | 183.5         | 1.464          | 0.180    | 7.8188        |                    |
| 15 minute summer               | S8      | 4.000             | S9      | 27.0          | 2.474          | 0.094    | 1.1942        |                    |
| 15 minute summer               | S9      | 1.007             | S21     | 217.8         | 1.092          | 0.705    | 13.8729       |                    |
| 15 minute summer               | S17     | 5.000             | S18     | 13.3          | 0.767          | 0.186    | 0.7450        |                    |
| 15 minute summer               | S18     | 5.001             | S19     | 39.5          | 0.848          | 0.352    | 1.0803        |                    |
| 15 minute summer               | S20     | 5.003             | S21     | 51.5          | 0.984          | 0.461    | 2.0205        |                    |
| 15 minute summer               | S21     | 1.008             | S32     | 433.3         | 1.081          | 0.788    | 24.8645       |                    |
| 15 minute summer               | S31     | 6.000             | S32     | 26.6          | 2.136          | 0.060    | 3.0310        |                    |
| 15 minute summer               | S32     | 1.009             | S33     | 482.0         | 1.167          | 0.876    | 3.2988        |                    |
| 15 minute summer               | S33     | 1.010             | S35     | 502.0         | 1.282          | 0.914    | 3.5219        |                    |
| 15 minute summer               | S35     | 1.011             | S26a    | 520.3         | 1.462          | 0.946    | 13.7163       |                    |

**Results for 10 year Critical Storm Duration. Lowest mass balance: 99.58%**

| Node Event         | US Node       | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|---------------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 30 minute summer   | S26a          | 21          | 106.769   | 0.546     | 508.7        | 0.9650        | 0.0000     | OK         |
| 30 minute summer   | HW1           | 24          | 106.707   | 0.529     | 518.8        | 0.9346        | 0.0000     | OK         |
| 30 minute summer   | HW2           | 24          | 106.699   | 0.627     | 479.2        | 1.1088        | 0.0000     | SURCHARGED |
| 30 minute summer   | S37           | 26          | 106.418   | 0.774     | 344.8        | 1.3684        | 0.0000     | SURCHARGED |
| 30 minute summer   | HW3           | 32          | 106.235   | 0.622     | 356.8        | 1.0993        | 0.0000     | OK         |
| 30 minute summer   | SWALE 2A      | 32          | 106.235   | 0.645     | 334.4        | 1.1397        | 0.0000     | OK         |
| 30 minute summer   | SWALE 2B      | 32          | 106.235   | 0.677     | 276.1        | 1.1957        | 0.0000     | OK         |
| 30 minute summer   | HW4           | 32          | 106.235   | 0.696     | 251.5        | 1.2291        | 0.0000     | SURCHARGED |
| 15 minute summer   | HW5           | 19          | 105.990   | 0.502     | 223.8        | 0.8871        | 0.0000     | OK         |
| 15 minute summer   | HW6           | 19          | 105.981   | 0.604     | 247.3        | 1.0674        | 0.0000     | FLOOD RISK |
| 2160 minute summer | DUMMY INLET   | 2040        | 104.222   | 0.297     | 0.0          | 0.3354        | 0.0000     | SURCHARGED |
| 2160 minute summer | BASIN A       | 2040        | 104.222   | 0.472     | 51.5         | 1384.8180     | 0.0000     | SURCHARGED |
| 2160 minute summer | HW9           | 2040        | 104.222   | 0.387     | 1.5          | 0.5532        | 0.0000     | SURCHARGED |
| 15 minute summer   | S19           | 11          | 107.178   | 0.168     | 39.5         | 0.2410        | 0.0000     | OK         |
| 15 minute summer   | DUMMY OUTFALL | 1           | 103.000   | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 2160 minute winter | BASIN B       | 2040        | 103.226   | 0.546     | 0.3          | 13.8028       | 0.0000     | OK         |

| Link Event<br>(Upstream Depth) | US Node     | Link              | DS Node       | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|-------------|-------------------|---------------|---------------|----------------|----------|---------------|--------------------|
| 30 minute summer               | S26a        | 1.012             | HW1           | 501.2         | 1.747          | 0.912    | 7.4826        |                    |
| 30 minute summer               | HW1         | Flow through Pond | HW2           | 457.2         | 0.503          | 0.027    | 94.8950       |                    |
| 30 minute summer               | HW2         | 1.013             | S37           | 334.0         | 2.108          | 0.651    | 2.7011        |                    |
| 30 minute summer               | HW2         | Infiltration      |               | 0.4           |                |          |               |                    |
| 30 minute summer               | S37         | 1.014             | HW3           | 343.7         | 2.170          | 2.121    | 1.9314        |                    |
| 30 minute summer               | HW3         | Flow through Pond | SWALE 2A      | 320.0         | 0.220          | 0.029    | 57.0083       |                    |
| 30 minute summer               | SWALE 2A    | Flow through Pond | SWALE 2B      | 271.4         | 0.242          | 0.033    | 61.6512       |                    |
| 30 minute summer               | SWALE 2A    | Infiltration      |               | 0.2           |                |          |               |                    |
| 30 minute summer               | SWALE 2B    | Flow through Pond | HW4           | 249.1         | 0.104          | 0.020    | 66.3985       |                    |
| 30 minute summer               | SWALE 2B    | Infiltration      |               | 0.3           |                |          |               |                    |
| 30 minute summer               | HW4         | 1.022             | HW5           | 251.4         | 2.280          | 2.252    | 1.7865        |                    |
| 30 minute summer               | HW4         | Infiltration      |               | 0.3           |                |          |               |                    |
| 15 minute summer               | HW5         | Flow through Pond | HW6           | 247.3         | 0.522          | 0.101    | 61.5141       |                    |
| 15 minute summer               | HW6         | 1.023             | BASIN A       | 303.9         | 5.012          | 0.702    | 2.2050        |                    |
| 15 minute summer               | HW6         | Infiltration      |               | 0.3           |                |          |               |                    |
| 2160 minute summer             | DUMMY INLET | 11.000            | HW8           | 0.0           | -0.004         | -0.002   | 0.1905        |                    |
| 2160 minute summer             | BASIN A     | Pump              | DUMMY OUTFALL | 0.0           |                |          |               | 0.0                |
| 2160 minute summer             | BASIN A     | Infiltration      |               | 4.4           |                |          |               |                    |
| 2160 minute summer             | HW9         | 7.000             | BASIN A       | 1.1           | 0.442          | 0.013    | 1.1267        |                    |
| 2160 minute summer             | HW9         | Infiltration      |               | 0.1           |                |          |               |                    |
| 15 minute summer               | S19         | 5.002             | S20           | 39.4          | 0.762          | 0.353    | 1.1162        |                    |
| 2160 minute winter             | BASIN B     | Pump              |               | 0.0           |                |          |               | 0.0                |
| 2160 minute winter             | BASIN B     | Infiltration      |               | 0.1           |                |          |               |                    |



**Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.58%**

| Node Event         | US Node | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|---------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 15 minute summer   | S1      | 11          | 113.337   | 0.655     | 49.1         | 0.9374        | 0.0000     | SURCHARGED |
| 15 minute summer   | S2      | 11          | 113.276   | 0.712     | 93.8         | 1.0188        | 0.0000     | SURCHARGED |
| 15 minute summer   | S3      | 11          | 113.174   | 0.645     | 137.7        | 0.9234        | 0.0000     | SURCHARGED |
| 15 minute summer   | S4      | 11          | 112.377   | 0.542     | 183.5        | 0.7750        | 0.0000     | SURCHARGED |
| 15 minute summer   | S5      | 11          | 111.847   | 0.297     | 230.1        | 0.4251        | 0.0000     | OK         |
| 15 minute summer   | S6      | 11          | 111.254   | 0.179     | 276.6        | 0.2558        | 0.0000     | OK         |
| 15 minute summer   | S12     | 10          | 110.729   | 0.144     | 49.1         | 0.2063        | 0.0000     | OK         |
| 15 minute summer   | S10     | 10          | 110.784   | 0.194     | 49.1         | 0.2770        | 0.0000     | OK         |
| 15 minute summer   | S11     | 10          | 110.672   | 0.214     | 97.6         | 0.3059        | 0.0000     | OK         |
| 15 minute summer   | S13     | 10          | 110.632   | 0.152     | 98.0         | 0.2171        | 0.0000     | OK         |
| 15 minute summer   | S14     | 10          | 109.944   | 0.144     | 243.7        | 0.2058        | 0.0000     | OK         |
| 15 minute summer   | S15     | 12          | 108.247   | 1.458     | 292.1        | 2.0858        | 0.0000     | SURCHARGED |
| 15 minute summer   | S16     | 12          | 108.202   | 1.446     | 293.4        | 2.0690        | 0.0000     | SURCHARGED |
| 2880 minute winter | HW8     | 2820        | 104.624   | 0.747     | 0.8          | 0.8451        | 0.0000     | OK         |
| 15 minute summer   | S7      | 12          | 108.270   | 0.270     | 323.2        | 0.3869        | 0.0000     | OK         |
| 15 minute summer   | S8      | 10          | 111.583   | 0.083     | 49.1         | 0.1188        | 0.0000     | OK         |
| 15 minute summer   | S9      | 12          | 108.242   | 1.494     | 409.9        | 2.1375        | 0.0000     | SURCHARGED |
| 15 minute summer   | S17     | 11          | 108.382   | 1.045     | 33.7         | 1.4948        | 0.0000     | SURCHARGED |
| 15 minute summer   | S18     | 12          | 108.140   | 1.057     | 73.5         | 1.5128        | 0.0000     | SURCHARGED |
| 15 minute summer   | S20     | 12          | 108.116   | 1.174     | 85.7         | 1.3281        | 0.0000     | SURCHARGED |
| 15 minute summer   | S21     | 12          | 108.053   | 1.580     | 763.3        | 2.7914        | 0.0000     | SURCHARGED |
| 15 minute summer   | S31     | 10          | 109.741   | 0.083     | 49.1         | 0.1184        | 0.0000     | OK         |
| 15 minute summer   | S32     | 12          | 107.748   | 1.414     | 860.5        | 2.4977        | 0.0000     | SURCHARGED |
| 15 minute summer   | S33     | 12          | 107.611   | 1.293     | 903.5        | 2.2841        | 0.0000     | SURCHARGED |
| 30 minute summer   | S35     | 20          | 107.462   | 1.162     | 897.2        | 2.0529        | 0.0000     | SURCHARGED |

| Link Event<br>(Upstream Depth) | US Node | Link              | DS Node | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|---------|-------------------|---------|---------------|----------------|----------|---------------|--------------------|
| 15 minute summer               | S1      | 1.000             | S2      | 45.2          | 0.692          | 0.633    | 2.0012        |                    |
| 15 minute summer               | S2      | 1.001             | S3      | 90.9          | 1.290          | 1.272    | 0.5913        |                    |
| 15 minute summer               | S3      | 1.002             | S4      | 136.7         | 1.942          | 0.980    | 3.1084        |                    |
| 15 minute summer               | S4      | 1.003             | S5      | 183.3         | 2.603          | 1.239    | 0.5326        |                    |
| 15 minute summer               | S5      | 1.004             | S6      | 229.8         | 2.220          | 0.664    | 2.9394        |                    |
| 15 minute summer               | S6      | 1.005             | S7      | 276.4         | 3.302          | 0.201    | 7.3851        |                    |
| 15 minute summer               | S12     | 3.000             | S13     | 48.9          | 1.414          | 0.313    | 0.1849        |                    |
| 15 minute summer               | S10     | 2.000             | S11     | 48.5          | 0.952          | 0.679    | 1.6081        |                    |
| 15 minute summer               | S11     | 2.001             | S14     | 96.9          | 2.800          | 0.424    | 0.3392        |                    |
| 15 minute summer               | S13     | 3.001             | S14     | 97.7          | 3.174          | 0.335    | 0.1718        |                    |
| 15 minute summer               | S14     | 2.002             | S15     | 243.0         | 1.588          | 0.131    | 6.9609        |                    |
| 15 minute summer               | S15     | 2.003             | S16     | 246.6         | 1.045          | 0.806    | 4.6401        |                    |
| 15 minute summer               | S16     | 2.004             | S21     | 298.0         | 1.063          | 0.973    | 18.6972       |                    |
| 2880 minute winter             | HW8     | Flow through Pond | HW9     | 0.4           | 0.027          | 0.000    | 70.5572       |                    |
| 15 minute summer               | S7      | 1.006             | S9      | 316.0         | 1.591          | 0.310    | 11.5886       |                    |
| 15 minute summer               | S8      | 4.000             | S9      | 48.7          | 2.716          | 0.170    | 2.8997        |                    |
| 15 minute summer               | S9      | 1.007             | S21     | 377.7         | 1.341          | 1.223    | 17.2682       |                    |
| 15 minute summer               | S17     | 5.000             | S18     | 33.0          | 0.771          | 0.462    | 3.0232        |                    |
| 15 minute summer               | S18     | 5.001             | S19     | 71.5          | 0.946          | 0.637    | 2.5314        |                    |
| 15 minute summer               | S20     | 5.003             | S21     | 83.5          | 0.946          | 0.747    | 3.2863        |                    |
| 15 minute summer               | S21     | 1.008             | S32     | 762.8         | 1.733          | 1.388    | 27.0841       |                    |
| 15 minute summer               | S31     | 6.000             | S32     | 48.7          | 2.060          | 0.109    | 3.8031        |                    |
| 15 minute summer               | S32     | 1.009             | S33     | 865.0         | 1.966          | 1.573    | 3.5183        |                    |
| 15 minute summer               | S33     | 1.010             | S35     | 904.4         | 2.055          | 1.646    | 3.9642        |                    |
| 30 minute summer               | S35     | 1.011             | S26a    | 890.6         | 2.024          | 1.620    | 16.9376       |                    |

**Results for 30 year +40% CC Critical Storm Duration. Lowest mass balance: 99.58%**

| Node Event         | US Node       | Peak (mins) | Level (m) | Depth (m) | Inflow (l/s) | Node Vol (m³) | Flood (m³) | Status     |
|--------------------|---------------|-------------|-----------|-----------|--------------|---------------|------------|------------|
| 30 minute summer   | S26a          | 21          | 107.211   | 0.988     | 931.6        | 1.7461        | 0.0000     | SURCHARGED |
| 30 minute summer   | HW1           | 24          | 107.133   | 0.955     | 964.4        | 1.6868        | 0.0000     | OK         |
| 30 minute summer   | HW2           | 24          | 107.133   | 1.062     | 701.4        | 1.8764        | 0.0000     | SURCHARGED |
| 30 minute winter   | S37           | 29          | 106.731   | 1.087     | 401.5        | 1.9200        | 0.0000     | SURCHARGED |
| 30 minute winter   | HW3           | 36          | 106.474   | 0.861     | 423.1        | 1.5205        | 0.0000     | OK         |
| 30 minute winter   | SWALE 2A      | 36          | 106.474   | 0.883     | 396.3        | 1.5611        | 0.0000     | OK         |
| 30 minute winter   | SWALE 2B      | 36          | 106.473   | 0.915     | 328.6        | 1.6174        | 0.0000     | OK         |
| 30 minute winter   | HW4           | 36          | 106.473   | 0.934     | 304.2        | 1.6510        | 0.0000     | FLOOD RISK |
| 15 minute winter   | HW5           | 18          | 106.087   | 0.599     | 286.5        | 1.0588        | 0.0000     | OK         |
| 15 minute winter   | HW6           | 17          | 106.082   | 0.705     | 299.1        | 1.2454        | 0.0000     | FLOOD RISK |
| 2880 minute winter | DUMMY INLET   | 2820        | 104.624   | 0.699     | 0.0          | 0.7906        | 0.0000     | SURCHARGED |
| 2880 minute winter | BASIN A       | 2820        | 104.624   | 0.874     | 47.8         | 2670.6750     | 0.0000     | SURCHARGED |
| 2880 minute winter | HW9           | 2820        | 104.624   | 0.789     | 1.2          | 1.1293        | 0.0000     | SURCHARGED |
| 15 minute summer   | S19           | 12          | 108.136   | 1.126     | 71.5         | 1.6118        | 0.0000     | SURCHARGED |
| 15 minute summer   | DUMMY OUTFALL | 1           | 103.000   | 0.000     | 0.0          | 0.0000        | 0.0000     | OK         |
| 2880 minute summer | BASIN B       | 2880        | 103.429   | 0.748     | 0.7          | 24.5245       | 0.0000     | OK         |

| Link Event<br>(Upstream Depth) | US Node     | Link              | DS Node       | Outflow (l/s) | Velocity (m/s) | Flow/Cap | Link Vol (m³) | Discharge Vol (m³) |
|--------------------------------|-------------|-------------------|---------------|---------------|----------------|----------|---------------|--------------------|
| 30 minute summer               | S26a        | 1.012             | HW1           | 923.5         | 2.100          | 1.680    | 9.9102        |                    |
| 30 minute summer               | HW1         | Flow through Pond | HW2           | 668.6         | 0.492          | 0.039    | 255.7149      |                    |
| 30 minute summer               | HW2         | 1.013             | S37           | 400.2         | 2.526          | 0.780    | 2.7011        |                    |
| 30 minute summer               | HW2         | Infiltration      |               | 0.7           |                |          |               |                    |
| 30 minute winter               | S37         | 1.014             | HW3           | 400.7         | 2.529          | 2.473    | 1.9314        |                    |
| 30 minute winter               | HW3         | Flow through Pond | SWALE 2A      | 373.6         | 0.246          | 0.034    | 104.6815      |                    |
| 30 minute winter               | SWALE 2A    | Flow through Pond | SWALE 2B      | 319.7         | 0.262          | 0.039    | 110.9677      |                    |
| 30 minute winter               | SWALE 2A    | Infiltration      |               | 0.3           |                |          |               |                    |
| 30 minute winter               | SWALE 2B    | Flow through Pond | HW4           | 304.2         | 0.106          | 0.024    | 117.3595      |                    |
| 30 minute winter               | SWALE 2B    | Infiltration      |               | 0.3           |                |          |               |                    |
| 30 minute winter               | HW4         | 1.022             | HW5           | 309.9         | 2.810          | 2.775    | 1.7865        |                    |
| 30 minute winter               | HW4         | Infiltration      |               | 0.3           |                |          |               |                    |
| 15 minute winter               | HW5         | Flow through Pond | HW6           | 299.1         | 0.591          | 0.122    | 80.2085       |                    |
| 15 minute winter               | HW6         | 1.023             | BASIN A       | 345.3         | 4.834          | 0.798    | 2.5195        |                    |
| 15 minute winter               | HW6         | Infiltration      |               | 0.3           |                |          |               |                    |
| 2880 minute winter             | DUMMY INLET | 11.000            | HW8           | 0.0           | -0.005         | -0.003   | 0.1905        |                    |
| 2880 minute winter             | BASIN A     | Pump              | DUMMY OUTFALL | 0.0           |                |          |               | 0.0                |
| 2880 minute winter             | BASIN A     | Infiltration      |               | 4.8           |                |          |               |                    |
| 2880 minute winter             | HW9         | 7.000             | BASIN A       | 0.7           | 0.477          | 0.009    | 1.1267        |                    |
| 2880 minute winter             | HW9         | Infiltration      |               | 0.2           |                |          |               |                    |
| 15 minute summer               | S19         | 5.002             | S20           | 66.2          | 0.813          | 0.593    | 2.3823        |                    |
| 2880 minute summer             | BASIN B     | Pump              |               | 0.0           |                |          |               | 0.0                |
| 2880 minute summer             | BASIN B     | Infiltration      |               | 0.1           |                |          |               |                    |

**Appendix G**  
**SuDS Treatment Calculations**

**Pollution hazard indices for different land use classifications (land use shaded grey applicable for the development)**

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



**Indicative SuDS mitigation indices for discharges to surface waters**  
**(SuDS components shaded grey applicable to this development)**

| Type of SuDS component        | Mitigation indices                                                                                                                                                                                                                                 |        |              |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------------|
|                               | TSS                                                                                                                                                                                                                                                | Metals | Hydrocarbons |
| Filter strip                  | 0.4                                                                                                                                                                                                                                                | 0.4    | 0.5          |
| Filter drain                  | 0.4                                                                                                                                                                                                                                                | 0.4    | 0.4          |
| Swale                         | 0.5                                                                                                                                                                                                                                                | 0.6    | 0.6          |
| Bio retention system          | 0.8                                                                                                                                                                                                                                                | 0.8    | 0.8          |
| Permeable pavement            | 0.7                                                                                                                                                                                                                                                | 0.6    | 0.7          |
| Detention basin               | 0.5                                                                                                                                                                                                                                                | 0.5    | 0.6          |
| Pond                          | 0.7                                                                                                                                                                                                                                                | 0.7    | 0.5          |
| Wetland                       | 0.8                                                                                                                                                                                                                                                | 0.8    | 0.8          |
| Proprietary treatment systems | These must demonstrate that they can address each of the contaminant types to acceptable levels for frequent events up to approximately the 1 in 1 year return period event, for inflow concentrations relevant to the contributing drainage area. |        |              |

**Indicative SuDS mitigation indices for discharges to groundwater**  
**(SuDS components shaded grey applicable to this development)**

| Characteristic of the material overlying the proposed infiltration surface, through which the runoff percolates           | Mitigation indices |        |              |
|---------------------------------------------------------------------------------------------------------------------------|--------------------|--------|--------------|
|                                                                                                                           | TSS                | Metals | Hydrocarbons |
| A layer of dense vegetation underlain by a soil with good contaminant attenuation potential of at least 300mm in depth    | 0.6                | 0.5    | 0.6          |
| A soil with good contaminant attenuation potential of at least 300mm in depth                                             | 0.4                | 0.3    | 0.3          |
| Infiltration trench underlain by a soil with good contaminant attenuation potential of at least 300mm in depth            | 0.4                | 0.4    | 0.4          |
| Constructed permeable paving underlain by a soil with a good contaminant attenuation potential of at least 300mm in depth | 0.7                | 0.6    | 0.7          |
| Bio retention underlain by a soil with good contaminant attenuation potential of at least 300mm in depth                  | 0.8                | 0.8    | 0.8          |

Proprietary treatment systems

These must demonstrate that they can address each of the contaminant types to acceptable levels for inflow concentrations relevant to the contributing drainage area.

**Indicative SuDS mitigation indices for discharges to surface waters**

| For surface water discharge from all roads except low traffic roads and trunks/motorways                                                  |                             |                           |                          |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------|--------------------------|
| Catchment A                                                                                                                               |                             |                           |                          |
| Source                                                                                                                                    | Required mitigation indices |                           |                          |
|                                                                                                                                           | TSS                         | Metals                    | Hydrocarbons             |
| Medium                                                                                                                                    | 0.7                         | 0.6                       | 0.7                      |
| Drainage Network                                                                                                                          |                             |                           |                          |
| Swale A (mitigation index <sub>1</sub> )                                                                                                  | 0.5                         | 0.6                       | 0.6                      |
| Swale B (mitigation index <sub>2</sub> )                                                                                                  | $(0.5 \times 0.5) = 0.25$   | $(0.5 \times 0.6) = 0.3$  | $(0.5 \times 0.6) = 0.3$ |
| Swale C (mitigation index <sub>3</sub> )                                                                                                  | $(0.5 \times 0.5) = 0.25$   | $(0.5 \times 0.6) = 0.3$  | $(0.5 \times 0.6) = 0.3$ |
| Swale D (mitigation index <sub>4</sub> )                                                                                                  | $(0.5 \times 0.5) = 0.25$   | $(0.5 \times 0.6) = 0.3$  | $(0.5 \times 0.6) = 0.3$ |
| Basin A (mitigation index <sub>5</sub> )                                                                                                  | $(0.5 \times 0.5) = 0.25$   | $(0.5 \times 0.5) = 0.25$ | $(0.5 \times 0.6) = 0.3$ |
| Bio retention underlain by a soil with good contaminant attenuation potential of at least 300mm in depth (mitigation index <sub>6</sub> ) | $(0.5 \times 0.8) = 0.4$    | $(0.5 \times 0.8) = 0.4$  | $(0.5 \times 0.8) = 0.4$ |
| Total                                                                                                                                     | 1.90                        | 2.15                      | 2.15                     |
| Check                                                                                                                                     | +1.20                       | +1.55                     | +1.45                    |

**Total mitigation = mitigation index 1 + (0.5 x mitigation index 2)**

***Indicative SuDS mitigation indices for discharges to surface waters***

| For surface water discharge from all roads except low traffic roads and trunks/motorways                                                  |                             |                          |                          |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------|--------------------------|
| Catchment B                                                                                                                               |                             |                          |                          |
| Source                                                                                                                                    | Required mitigation indices |                          |                          |
|                                                                                                                                           | TSS                         | Metals                   | Hydrocarbons             |
| Medium                                                                                                                                    | 0.7                         | 0.6                      | 0.7                      |
| Drainage Network                                                                                                                          |                             |                          |                          |
| Basin B (mitigation index <sub>1</sub> )                                                                                                  | 0.5                         | 0.5                      | 0.6                      |
| Bio retention underlain by a soil with good contaminant attenuation potential of at least 300mm in depth (mitigation index <sub>2</sub> ) | $(0.5 \times 0.8) = 0.4$    | $(0.5 \times 0.8) = 0.4$ | $(0.5 \times 0.8) = 0.4$ |
| Total                                                                                                                                     | 0.90                        | 0.90                     | 1.00                     |
| Check                                                                                                                                     | +0.20                       | +0.30                    | +0.30                    |

***Total mitigation = mitigation index 1 + (0.5 x mitigation index 2)***



**Appendix H**  
**Pre-planning enquiry**

|                                |                                       |                      |                                               |
|--------------------------------|---------------------------------------|----------------------|-----------------------------------------------|
| Response to: Developer e-mail: |                                       |                      |                                               |
| Planning Ref:                  |                                       | Our Ref: ST84SE/ 104 | Our Email: planning.liaison@wessexwater.co.uk |
| Proposal:                      | Proposed Development of 135 dwellings |                      |                                               |
| Location:                      | Boreham Road, Warminster              | DATE                 | 22.10.2025                                    |

Thank you for your pre-development enquiry. Extracts from our records showing the approximate location of our apparatus within the vicinity of the site are attached.

We have reviewed documents submitted in support of the enquiry. We have following comments to make:

#### **Proposed Foul Sewerage**

Wessex Water will accommodate domestic type foul flows in the public foul sewer with connections made on a size for size basis, Developers fund the cost of connecting to the nearest 'size for size' sewer and Wessex Water will manage the sewer network to accommodate foul flows from granted development. We fund this through our infrastructure charging arrangements.

Development of this size will require 150mm dia connection to meet the size for size requirements. The nearest size for size point of connection would be the 150mm Public Foul Sewer in the Woodcock Road and the Den. An alternative point of connection could be achieved via 150mm dia Public Foul Sewers in Boreham Road.

The point of connection to the public foul network is by application and agreement and Wessex Water will accommodate domestic type foul flows in the public foul sewer with connections made on a 'size for size' basis, Developers fund the cost of connecting to the nearest 'size for size' foul sewer and Wessex Water will manage the foul sewer network to accommodate foul flows from granted development. We fund this through our infrastructure charging arrangements.

The developer should contact the local development team [development.north@wessexwater.co.uk](mailto:development.north@wessexwater.co.uk) to agree proposals for the Section 104 adoption or Section 106 connection and submit details for technical review prior to construction. We will not accept foul connections from below ground level, foul flows from below ground level must be pumped to ground level prior to connection to the public foul sewer.

Separated systems of drainage are required: Wessex Water will not accept surface water or land drainage flows to the public foul sewer and treatment works, either directly or indirectly.

**Please Note:** No surface water runoff or land drainage will be accepted into the foul sewer either directly or indirectly.

#### **Surface Water Drainage (rainwater falling onto, and running off, impermeable surfaces)**

Surface water must be disposed of via the SuDS Hierarchy which is subject to Building Regulations and NPPF.

No surface water runoff, land drainage or ground water will be accepted into a public sewer that carries sewerage, either directly or indirectly.

The National Planning Policy Framework (NPPF) mandates that Sustainable Drainage Systems (SuDS) must be incorporated into new developments to manage surface water runoff, mitigate flood risks, and provide additional benefits, including enhanced water quality and green spaces.

In line with the drainage hierarchy outlined in Approved Document H of the Building Regulations, Planning Practice Guidance, and the necessity to address water scarcity, all surface water runoff should aim to be discharged as high up the following hierarchy as feasible:

- Rainwater reuse through harvesting or greywater recycling
- An adequate soakaway or other infiltration system
- A hybrid solution involving infiltration and discharge to a surface water body
- Discharge directly to a surface water body (e.g., an ordinary watercourse)

- Discharge to a surface water sewer, highway drain, or other drainage system

Wessex Water statement on surface water discharge can be accessed via the following link: :

<https://developerservices.wessexwater.co.uk/media/m4rjrfmg/wwds-dev063p-rainwater-drainage-policy.pdf>

Drainage strategy should utilise SuDS features. Please agree surface water drainage strategy with the LLFA.

### **Adoption**

Wessex Water can adopt SuDS features as part of a surface water sewer network, SuDS schemes will be required to have full S104 technical approval and full planning approval before construction work begins. All drainage design requirements for the site (discharge rates, attenuation, climate change etc.) must be agreed, in consultation with the Local Planning Authority / Lead Local Flood Authority, prior to the submission of a formal S104 application. Adoption is by agreement with Wessex Water. More detailed information and guidance for adoptable standards can be found on our Developer Services Web Pages Sector guidance on sewerage and water adoption agreements (wessexwater.co.uk)

### **Water Supply**

Development of the site requires min 125mm/5" Distribution Main connection.

Wessex Water will provide a point of connection for new water mains to be laid into the development site, either through a Section 41 agreement or a self-lay arrangement.

Developers may connect to our water network on a size for size basis at their cost and Wessex Water will undertake any network reinforcement that may be required to accommodate granted development, this is funded through our infrastructure charging arrangements. Upon grant of planning Wessex Water will undertake a modelling exercise to determine the impact on our network and manage any necessary improvements.

The most appropriate point of connection for the development would appear to be to the 180mm diameter distribution main in Woodcock Road.

For more details and guidance for applying to connect to our networks please see our website: <https://www.wessexwater.co.uk/services/building-and-developing/building-multiple-properties-or-large-developments>

***Please note:*** On site private storage and pump systems will be required for buildings greater than 2 storeys high. No guarantee can be given on a specific pressure or to maintaining that pressure. Normally it will be no less than 10m head of water. (1 bar pressure at 9 litres a minute) on the property boundary.

### **New Appointments and Variations (NAVs)**

The NAV Market enables developers to choose their water or sewerage undertaker for a specific geographic area. For developers wishing to consider an alternative supplier or seeking further information, a full list of appointees and further guidance can be found on the Developing a new site (wessexwater.co.uk) and Ofwat website.

If you are making a NAV enquiry, there is a Wessex Water dedicated wholesale team that deal with NAV enquiries. Full details are on our website including guidance notes, our policy and contact details <https://developerservices.wessexwater.co.uk/new-appointments-and-variations>

I trust that you will find the mapping and initial comments of use.

**Note:** These comments are based upon known circumstances prevailing at the time of writing. A review of the contents of this email is required where 18 months or more have elapsed since issue or in the light of significant changes likely to impact upon the response (e.g. changes in development numbers or phasing). Please email review requests to [planning.liaison@wessexwater.co.uk](mailto:planning.liaison@wessexwater.co.uk)