Severn Trent Water
surface water manhole
9702
CL: 114.220m
IL: Unknown
Depth: Unknown

Severn Trent Water foul
manhole 9705
CL: 114.230m
IL: 112.900m
Depth: 1.330m

Demarcation Chamber
CL: 113.750m
IL: 113.036m
Discharge foul to Severn Trent Water sewer. Subject to an indirect S106 agreement.

Incoming pumped discharge to be aligned at 180° with the 150mmØ outlet.

150mmØ VC

F27

Type C permeable paving on driveways and private access roads with impermeable membrane for plots 1 and 2 to provide treatment and storage for surface water runoff.

Minimum storage provided = 21m³

Perforated pipe

Foul water rising main

Type A permeable paving to drain via infiltration on driveways and private access roads to provide treatment and storage for surface water.

Storage provided = 64m³.

Architect's proposed location of RWP to be relocated as shown

Type C permeable paving on driveways and private access roads with impermeable membrane for plots 3 and 4 to provide treatment and storage for surface water.

Minimum storage provided = 35m³

Perforated pipe

174m² x 0.4m deep cellular attenuation wrapped in an impermeable membrane, suitably sized to cater for all storms up to and including a 1 in 100 year storm + 40% for climate change.

CL: 110.724m
Soffit Level: 109.741
IL: 109.341m

Attenuation Volume = 54m³

Flow Control
Discharge rate = 2l/s
To be Hydro-Brake CFF-0067-2000-0800-1935 or similar.

Headwall and SW outfall
IL: 109.200m

Private foul water pumping station restricting flows at 2.0l/s.

A dual pump set is required with suitable telemetry to provide alerts maintenance purposes and in the event of system failure.

24-hour storage of at least 10350l to be provided.

Space required for kiosk.

Perforated pipe

Soakaways serving partial roof areas for plots 7.
Storage provided = 3m³.
Infiltration testing in this area showed high infiltration rates.

Soakaways serving partial roof areas for plot 6.
Storage provided = 3m³.
Infiltration testing in this area showed high infiltration rates.

Soakaways serving partial roof areas for plot 5.
Storage provided = 2.5m³.
Infiltration testing in this area showed high infiltration rates.

Long radius bend

Note:
- Architect to confirm RWP and SVP pop up locations at detailed design phase

Existing weir to be repaired to facilitate storage for up to 56m³ New sluice between existing pond and existing ditch to allow for more attenuation in existing pond.

Existing pond to be desilted. Approx. storage provided = 56m³

2No. large fallen ash trees to be removed to provide access for maintenance. Headwall for overflow pipe.

Overflow pipe between existing pond to new detention basin and soakaway.

Headwall

Proposed soakaway/ detention basin to provide additional storage and soakage to cater for surface water flows.

Storage = 36m³

Infiltration testing in this area showed high infiltration rates.

Headwall and SW outfall IL=109.680m

Drainage Legend:

- Site Boundary
- Public Surface Water Sewer
- Public Foul Water Sewer
- Rodding Eye
- New Private Surface Water Drainage
- Perforated Pipe
- New Private Foul Water Drainage
- New Private Foul Pumping Station with 24-hour storage
- Cellular Attenuation
- Type A / Type C Permeable Paving
- Gully
- Headwall
- Proposed Basin
- Proposed Soakaway
- Non-return Valve
- ACO Channel
- Back Inlet Gully

SAFETY,HEALTH & ENVIRONMENTAL HAZARD INFORMATION BOX.

The hazards noted below are in addition to the normal hazards and risks faced by a competent contractor when dealing with the types of works detailed on this drawing.

CONSTRUCTION RISKS:
- Deep Trenches
- Unforeseen Services
- Leptospirosis

Notes:

1. DO NOT SCALE FROM THIS DRAWING.
2. All dimensions are in millimetres Unless Noted Otherwise (u.n.o.)
3. Drawing is to be read in conjunction with all relevant architect's drawings. Any inconsistencies should be reported to PRP immediately.
4. All levels and dimensions are to be checked on site before any work commences.
5. The Health and Safety at Work act is to be complied with at all times. Attention is drawn to the wearing of hard hats, reflectorised clothing, and the use of any other required safety equipment.
6. Print in colour

Drainage:

1. The position, line, level and diameter of all existing drainage apparatus should be confirmed on site prior to the commencement of the works. Any discrepancies should be reported to PRP immediately.
2. The connection of foul and surface water drainage to the existing public sewer system shall be subject to the approval of the water authority
3. For positions of all rainwater pipes & foul outlets refer to Architect's drawings.
4. Drainage designed in accordance with the Sewerage Sector Guidance, Design and Construction Guidance ("the Code") Approved Version 2.0, 10 March 2020 and Building Regulations Part H.
5. All joints between precast manhole components shall have a minimum uncompressed thickness of 10mm of proprietary bitumen or resin mastic sealant.
6. Storm & foul branch connections are to be laid at gradients of between 1:10 & 1:80
7. All in-situ concrete shall be minimum grade GEN3.
8. Precast concrete cover & reducing slabs to be heavy duty reinforced concrete to BS 5911.
9. Rising mains shall be black MDPE SDR11 as WI 4-32-03 & joints & fittings to be in accordance with WI 4-32-04. Other approved pipe materials to be in accordance with their relevant BS.
10. Manhole covers & frames shall be manufactured in cast iron or ductile iron & shall comply with requirements of BS EN 124 & shall be kite marked or equivalent.
11. All completed work shall be suitably protected from damage by construction work. Damaged drainage will not be accepted. It is recommended that no heavy loading or underground work is permitted above or near unprotected drainage, and that dumpers, trucks, fork lifts or other heavy vehicles are not driven along or near pipe runs.
12. Inspection chambers, and flow control units are to be installed strictly in accordance with manufacturer guidance and instructions
13. All drainage works to be constructed to Building Regulations Part H and Design and Construction Guidance.
14. Foul pipes to be wrapped in an impermeable membrane where they cross permeable paving, to prevent any surface water seepage.

Rev	Date	Description	By / Chk
C1	18/08/2025	Foul network updated to suit new foul pump station location. FCC upsized to suit flow control.	VP / VSP
P4	24/04/2025	Aco channels plots 6 and 7 added	PA / VSP
P3	05/11/2024	Updated drainage layout and manhole schedule	DC / DE
P2	30/09/2024	Issued for comments. Site plan updated.	VSP / DE
P1	26/09/2024	Issued for comments	VSP / DE

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Client:
Springbourne Homes Ltd

Architect:
Hayward Architects

Project:
Proposed Housing Development
The Coppice
Burbage

Title:
Proposed Drainage Layout

Status:
PRELIMINARY

Engineer:	VSP	Date:	September 2024
Drawn:	VSP	Scales @ A1:	1:250
Checked:	DE		
Project No:	82907	Drg No: 102	Rev: C1

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