Drainage Strategy

Surface Water Drainage

- Under part H of the Building Regulations the following discharge heirarchy shall be considered:

1. Soakaways - The British Geological Survey Map of Britain indicates the bedrock here to be Edwalton Member, which weathers into mudstone and siltstone with a negligable permeability. The nearest borehole data indicates a high mudstone and clay content. Due to this information soakaways are deemed unfeasible for this development.
2. Watercourses - There is a culverted watercourse located to the west of the site.
3. Sewers - There are no surface water sewers present in the immediate vicinity of the site.

- A gravity system will be constructed carrying flows to a attenuation basin and a flow control device
- Permeable paving will provide treatment and storage of surface water runoff, as well as retaining the first 5mm of runoff within the site.
- Attenuation basin is proposed to cater for all storms up to and including 100yr + 40% climate change storm.
- A Hydro-brake flow control will be used to restrict flows discharging into the culverted watercourse at 2 l/s.
- Discharging into the culverted watercourse will be subject to LLFA and Ordinary Watercourse agreement.

Foul Water Drainage

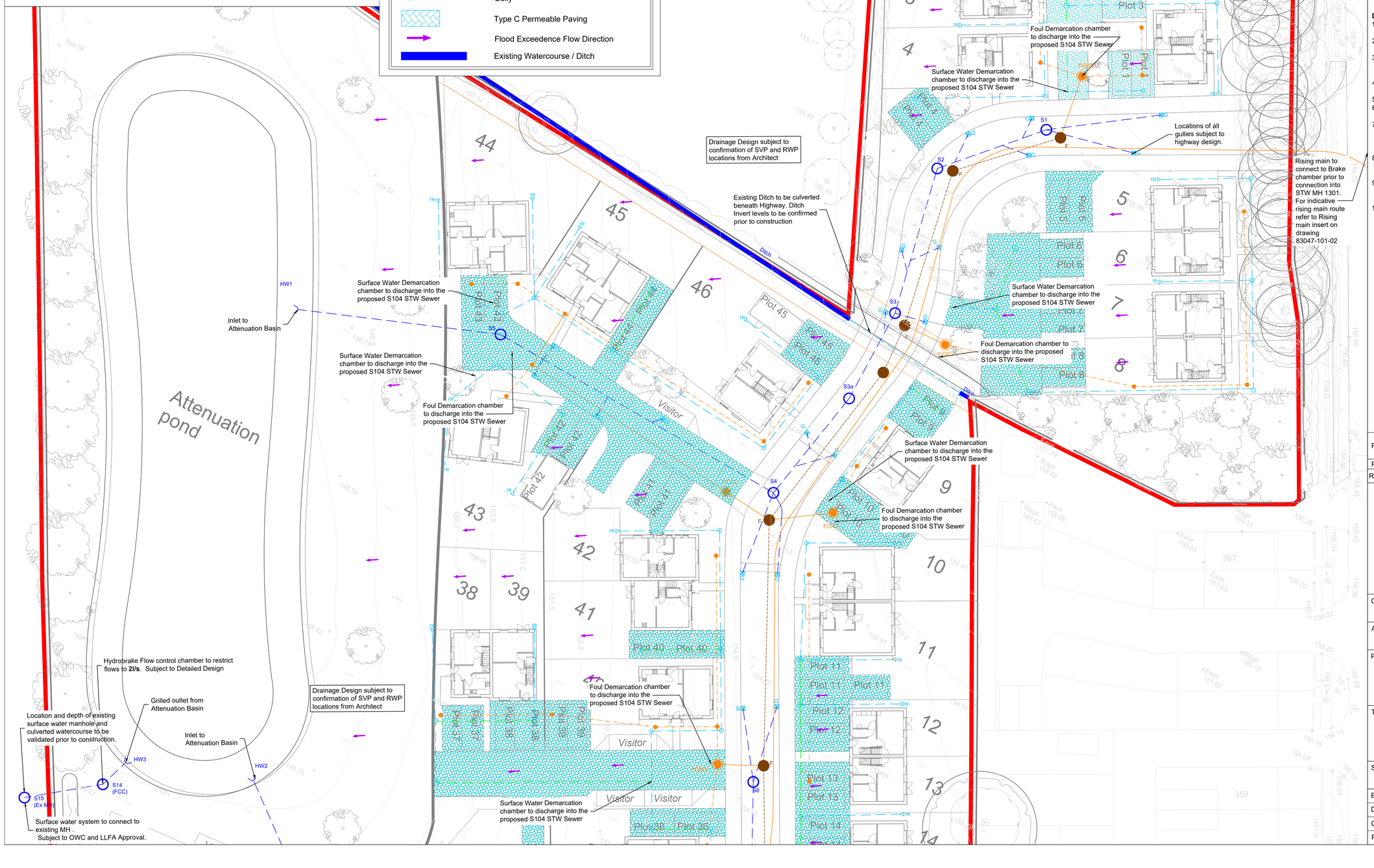
- A gravity system will be constructed, connecting flows discharging into a Type 3 pumping station prior to discharging into the XXmm Ø Severn Trent Water foul sewer located along Station Road.
- Discharging in the Severn Trent Water Sewer will be subject to a direct S106 agreement.

Flood Exceedance

- The voids within the subbase of the permeable paving will provide storage for the first 5mm of rainfall.
- In the event of system failure or an excessive rainfall event, some overland flows will travel westwards, towards the attenuation basin, away from any buildings and properties, and some will flow and be retained within the attenuation basin, hence preventing any adverse effects on properties.

Drainage Legend:

- Site Boundary
- Proposed Public Surface Water Sewer (MH)
- Proposed Public Foul Water Sewer (MH)
- Proposed Public Foul Water Rising Main
- Proposed Private Surface Water Drainage (S)
- Surface Water Demarcation Chamber (DC)
- Perforated Pipe
- Proposed Private Foul Water Drainage (F)
- Foul Water Demarcation Chamber (DC)
- Rodding Eye (RE)
- Gully (G)
- Type C Permeable Paving
- Flood Exceedence Flow Direction
- Existing Watercourse / Ditch



SAFETY,HEALTH & ENVIRONMENTAL HAZARD INFORMATION BOX. 1

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.

DEMOLITION RISKS:

CONSTRUCTION RISKS:

MAINTENANCE / CLEANING RISKS:

Notes:

1. DO NOT SCALE FROM THIS DRAWING.
2. PRINT IN COLOUR.
3. All dimensions are in millimetres Unless Noted Otherwise (u.n.o.)
4. Drawing is to be read in conjunction with all relevant architect's drawings. Any inconsistencies should be reported to PRP immediately.
5. All levels and dimensions are to be checked on site before any work commences.
6. 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.

Drainage:

1. Invert levels of existing manholes to be checked on site prior to commencing any drainage works.
2. For positions of all rainwater pipes & foul outlets refer to Architect's drawings.
3. All joints between precast manhole components shall have a minimum uncompressed thickness of 10mm of proprietary bitumen or resin mastic sealant.
4. Storm & foul branch connections are to be laid at gradients of between 1:10 & 1:80
5. All in-situ concrete shall be minimum grade GEN3.
6. Precast concrete cover & reducing slabs to be heavy duty reinforced concrete to BS 5911.
7. 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.
8. 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.
9. Where there is no intermediate manhole between the start of a surface water pipe run and the soakaway the gradient of the run shall be not less than 1 : 60.
10. 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.

Rev	Date	Description	By / Chk
P2	13/03/2026	Drainage Strategy updated to suit Architect Plan update and LLFA comments.	EC / JMN
P1	13/08/2025	Issued for comments	EC / JMN

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Client: Cartwright Homes

Architect: Hayward Architects Ltd

Project: Station Road, Bagworth

Title: Drainage Strategy Sheet 1 of 2

Status: **PRELIMINARY**

Engineer:	EC	Date:	August 2025
Drawn:	EC	Scales @ A1:	1:250
Checked:	JMN		
Project No:	83047	Drg No: 101-01	Rev: P2

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