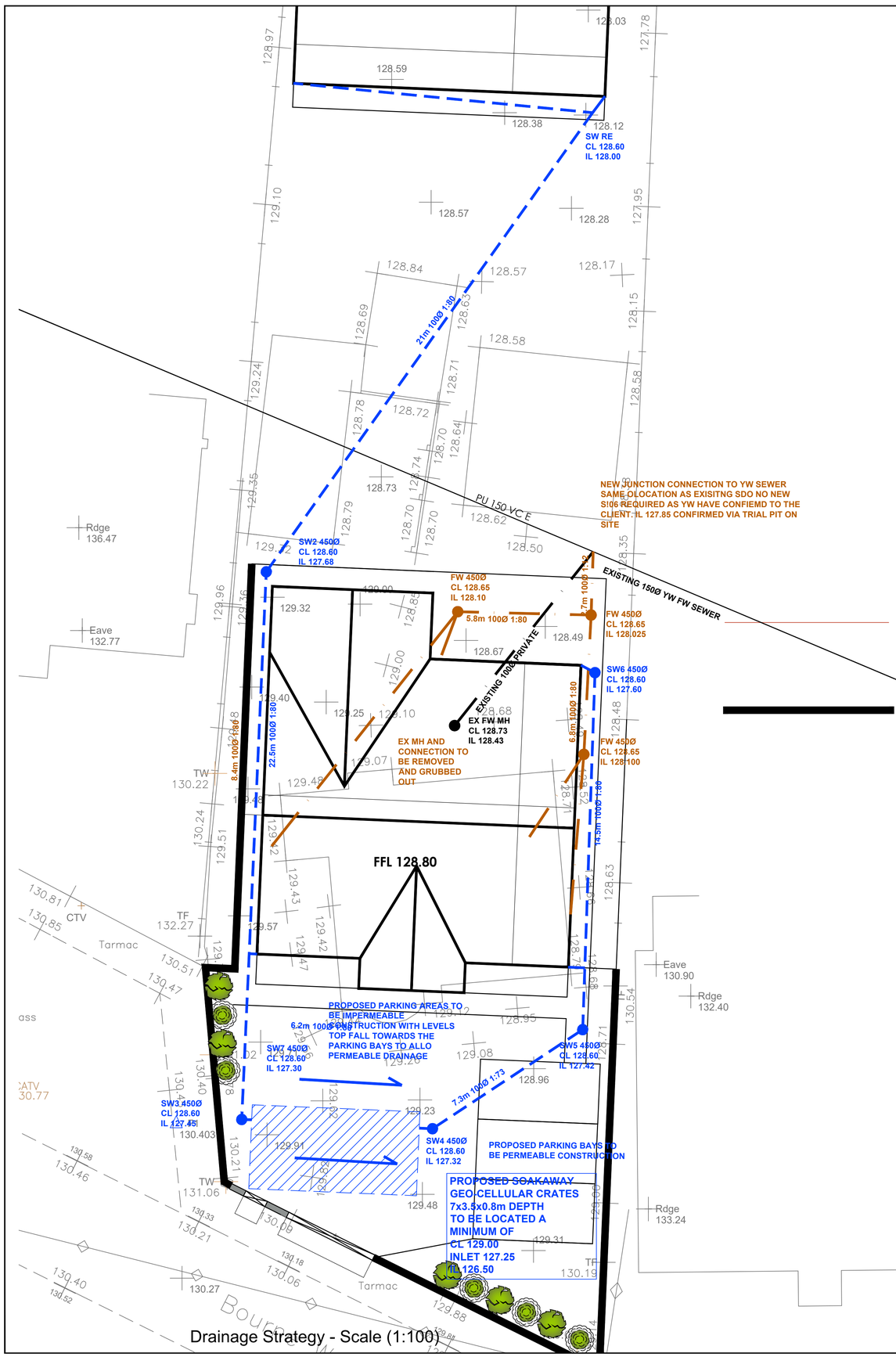


Drainage Strategy - Scale (1:100)

RWP AND SVP/FOUL CONNECTIONS ARE SUBJECT TO FINAL CONFIRMATION BY ARCHITECT

Key

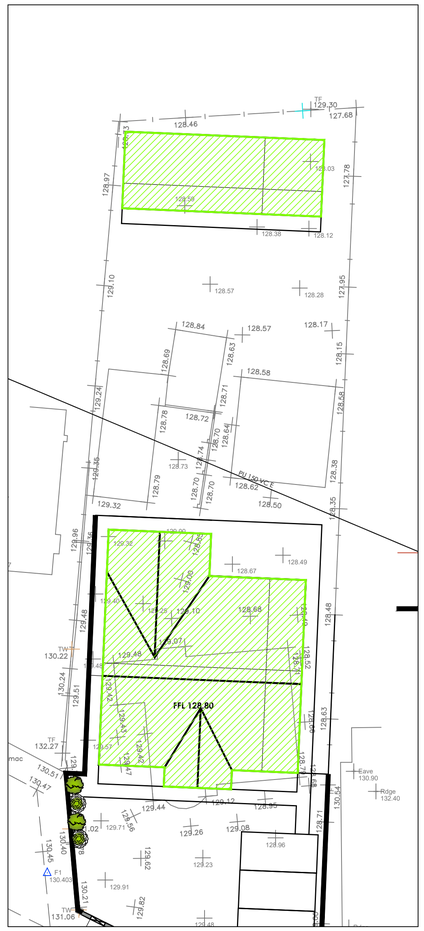
- Proposed Surface Water Drainage
- Proposed Foul Water Drainage
- Existing Sewer

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Status: PRELIMINARY

No.	Revision	Date	Drwn
P1	FIRST REVISION	09.10.26	AD



Proposed Impermeable Area Plan - Scale (1:200)
Area 255m2 inc 10% UC 25m2
TOTAL 280m2

DRAINAGE STRATEGY

EXISTING DRAINAGE

Existing drainage comprises the 150 mm diameter Yorkshire Water public foul sewer and existing private foul drainage indicated. Confirm sewer positions, ownership, diameters, condition, invert levels and connections by survey and trial excavation before construction. Protect existing sewers and maintain their operation throughout the works.

SURFACE WATER DRAINAGE

Roof runoff shall discharge through a separate private surface water drainage system to the proposed geo-cellular soakaway. The contributing impermeable area is 280 m², incorporating the urban creep allowance identified on the drawing.

Infiltration testing undertaken by DART Engineers on 7 October 2026 is reported in document 26942-PR-001 Rev A. The hydraulic calculations adopt an infiltration rate of 1.36 × 10 ⁻⁵ m/s, equivalent to 0.0489 m/hr, with a factor of safety of 2.0.

The proposed soakaway comprises geo-cellular crates measuring 7.0 m × 3.5 m × 0.8 m effective depth. At a minimum void ratio of 95%, the nominal effective storage volume is 18.62 m³. Install with permeable geotextile, suitable bedding, accessible inspection points and upstream silt interception in accordance with the manufacturer's requirements.

The drainage design shall accommodate the 1-in-100-year rainfall event with a 45% climate change allowance. Final soakaway levels and effective storage shall be coordinated with the hydraulic model before construction. No surface water connection to the public foul sewer is proposed.

Locate the soakaway at least 5 m from buildings and maintain suitable clearance from public sewers, services and boundaries. The soakaway base shall remain at least 1 m above the maximum likely groundwater level.

PARKING AND EXTERNAL AREAS

The designated parking bays shall comprise permeable paving over an open-graded sub-base allowing infiltration into the underlying ground. Grade adjoining impermeable parking/manoeuvring areas towards the permeable bays, as indicated.

Size the permeable paving and sub-base storage for the full contributing paved catchment and anticipated vehicle loading. Prevent sediment contamination during construction and maintain infiltration performance throughout the development's lifetime.

FOUL WATER DRAINAGE

Foul drainage shall discharge by gravity through the proposed private drainage system to a new junction connection to the existing Yorkshire Water public foul sewer.

Confirm the receiving sewer invert and final connection detail before construction and demonstrate a continuous gravity fall from the proposed foul drainage. Remove redundant private drainage and seal abandoned connections appropriately.

Foul and surface water systems shall remain separate. Coordinate final rainwater pipe,soil vent pipe and internal drainage positions with the architect.

CONSTRUCTION, EXCEEDANCE AND MAINTENANCE

Verify pipe gradients, invert levels, cover depths and soakaway formation levels before construction. Refer discrepancies to the drainage designer before installation. Provide pipe protection and chamber covers appropriate to the proposed loading.

Grade external areas to direct exceedance runoff away from buildings towards suitable areas within the site, without increasing flood risk to neighbouring land or the highway.

The proposed private drainage, soakaway and permeable paving shall remain the responsibility of the site owner. Maintain these features in accordance with the applicable sections of the accompanying Surface Water Drainage Maintenance Schedule and manufacturer's instructions. Keep inspection points accessible and retain maintenance records.

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PROJECT: Bourne Walk, Staincross

DRAWING TITLE: Drainage Strategy

Drawn	Chkd	Date	Scale
AD	RT	Oct 2026	As Shown

Sheet Size	Drawing No.	Revision
A1	26942-DR-C-0100	P2