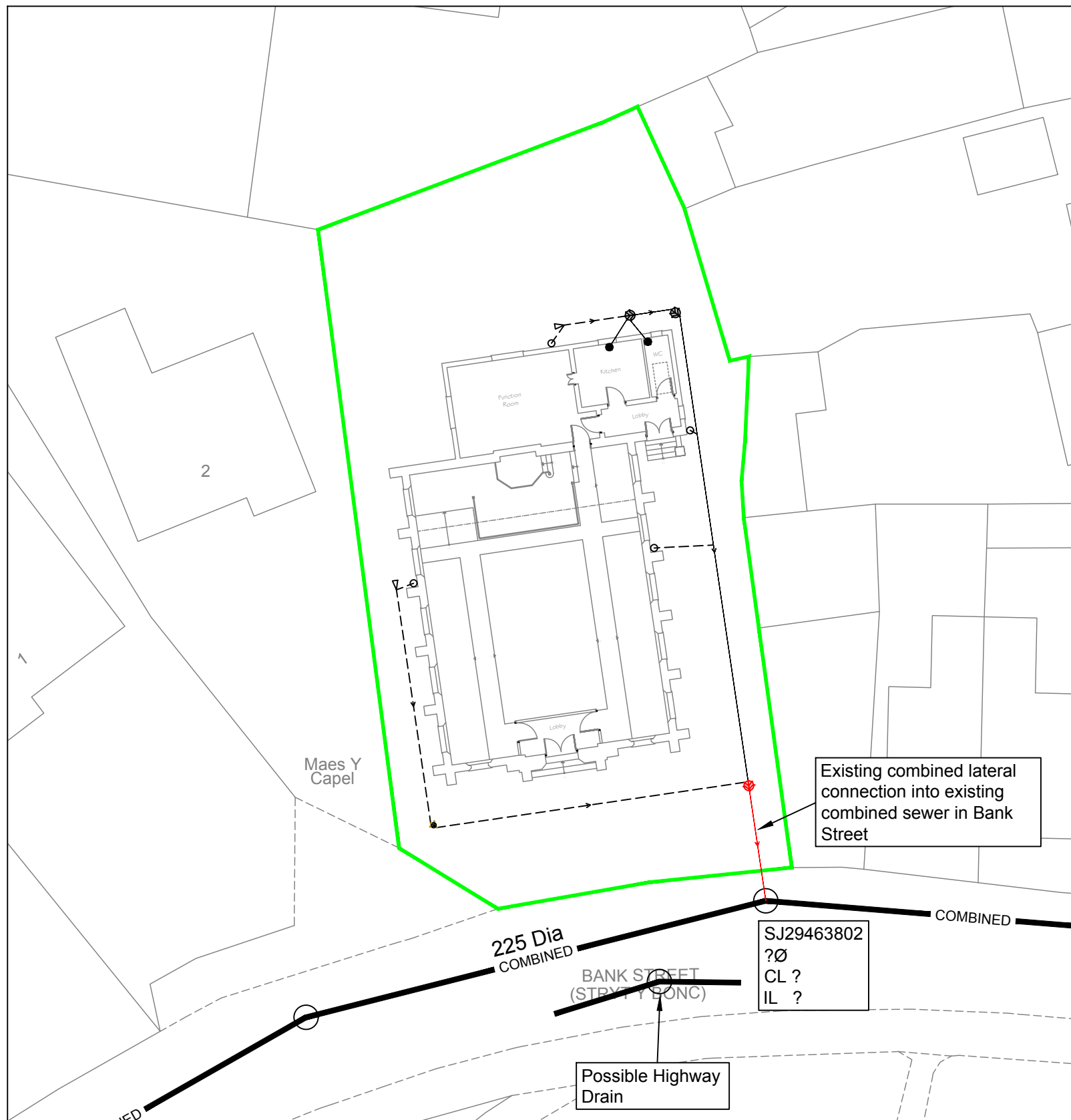
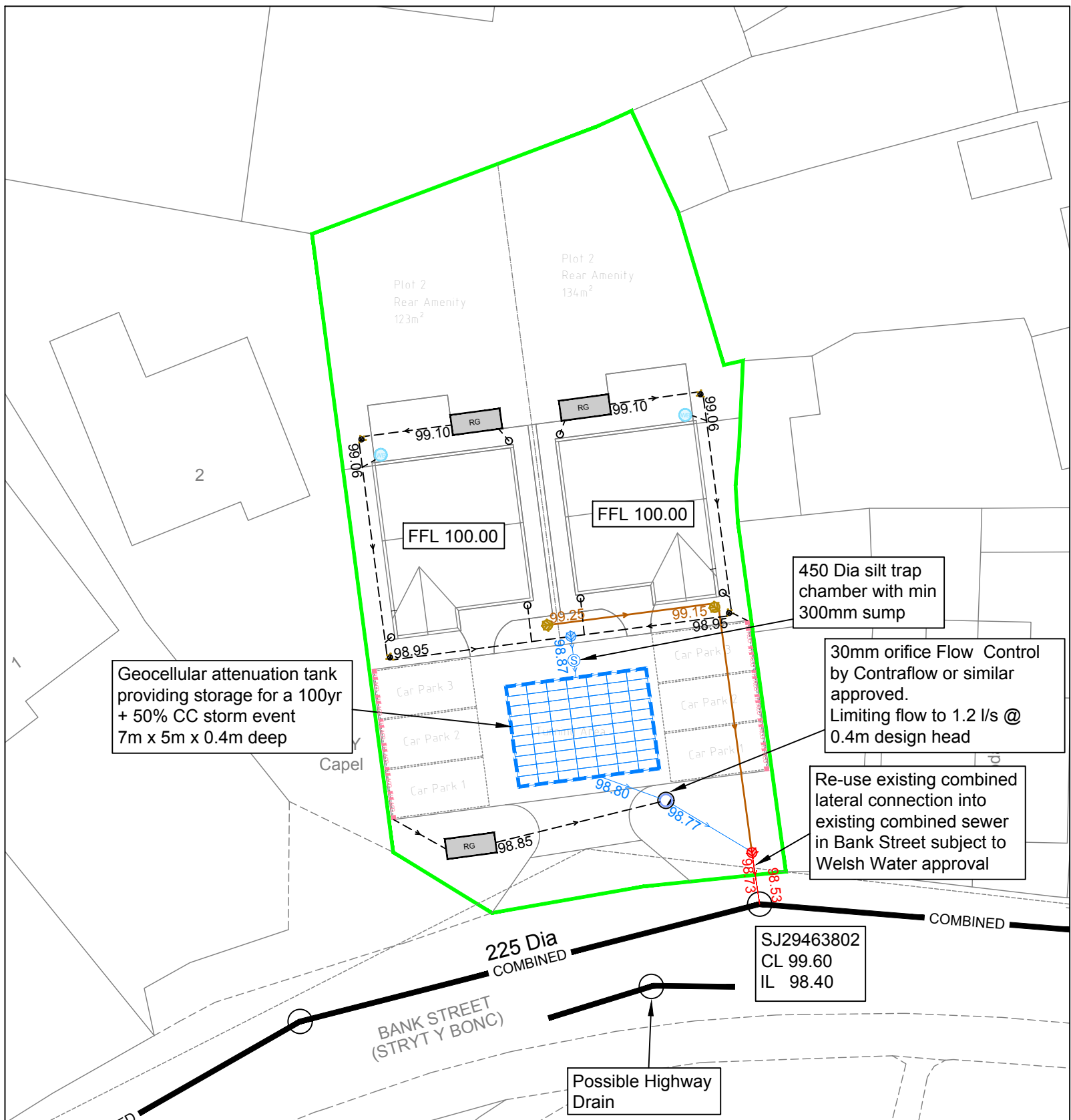


DO NOT SCALE

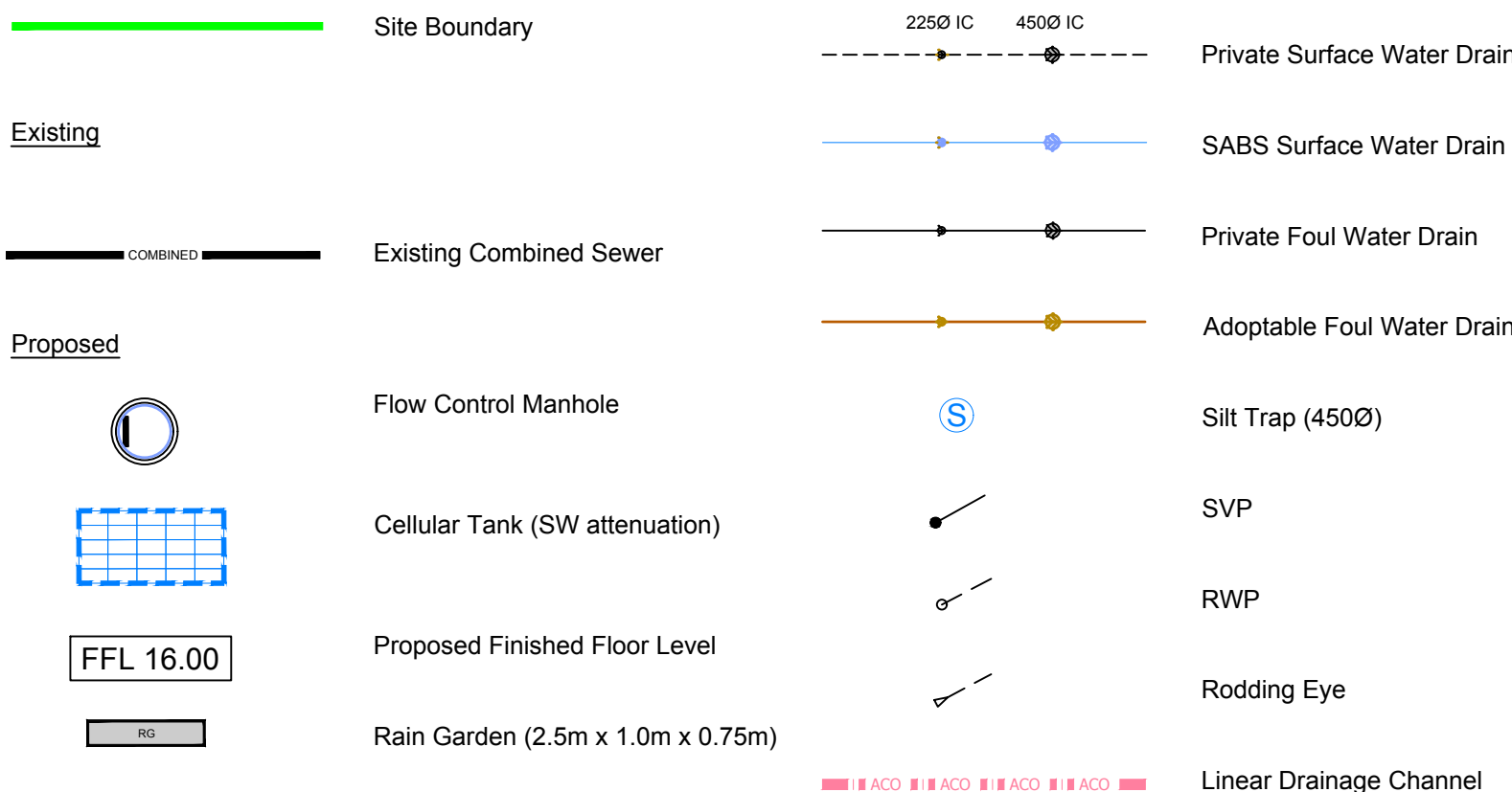


Existing Drainage



Proposed Drainage

Legend



Maintenance / Responsibilities

Adoption and maintenance of all surface water components serving 2 or more properties subject to SAB approval.

Client are proposing to set up a 'Private Management Company' to maintain the SAB approved surface water network in the future. WCBC SABS require details of the Management Company

Pipes and manholes:

All piped networks to have CCTV survey at end of construction activities. Any debris to be removed. Future maintenance to involve inspections to ensure no silt build ups within network. SUDS Management Plan to be produced to address frequency and type of maintenance activities

Geocellular Storage Tank:

To be maintained by private 'Management Company' SUDS Management Plan to be produced to address frequency and type of maintenance activities

Flow Control:

To be maintained by private 'Management Company' SUDS Management Plan to be produced to address frequency and type of maintenance activities.

Surface Water Flow Rates

Developable Site Area = 0.07ha

Existing Brownfield Run-off Rates

Based on 250sq.m. existing impermeable area

1yr	= 1.74 l/s	(25.04 mm/hr rainfall)
30yr	= 4.25 l/s	(61.14 mm/hr rainfall)
100yr	= 5.47 l/s	(78.73 mm/hr rainfall)

Proposed Run-off Rates

(30% betterment on existing 1 year flow rate)

1yr	= 1.2 l/s
30yr	= 1.2 l/s
100yr	= 1.2 l/s

Proposed impermeable areas = 290sq.m.

100yr attenuation storage = approx 14cu.m (+50% climate change)

5mm Interception

Required 5mm interception value = 1.45m³

3 no rain gardens each holding 0.525m³

Drainage Strategy

Existing Drainage

We understand both foul and surface water flows discharge to a combined drain within the site which discharges into the combined public sewer in Bank Street. The client has proven this on site within trial excavations.

Proposed Foul

A gravity connection from the development is achievable to discharge into the existing WW combined sewer. We are proposing to re-use the existing lateral subject to Welsh Water approval via a S104 Application.

Proposed Surface Water

1. Collection for re-use
Water butts to be installed to rear RWP's on individual properties for garden re-use.

2. Infiltration
Trial excavations have confirmed the ground is underlain with cohesive strata and therefore infiltration is not suitable for the development.

3. Watercourse
No open/culverted watercourses are present within the vicinity of the development site.

4. Highway Drain
A possible highway drain may be present within Bank Street adjacent to the site entrance. Client to investigate this drain further via CCTV survey.

4. Surface Water Sewers
No surface water sewers are present within the vicinity of the development site.

5. Combined Sewer
We are currently proposing to connect surface water into the combined sewer at a restricted flow rate. We are proposing to re-use the existing combined lateral subject to Welsh Water approval via a S104 Application.

STRATEGY



Tel: 01244 684910
Email: admin@coopers.co.uk
Web: http://coopers.co.uk

Park House
Sandpiper Court
Chester Business Park
Chester
CH4 9QU

Client

Blueprint Architectural Services

Project

Chapel Salem, Bank Street,
Ponciau, Wrexham.

Title

Existing & Proposed Drainage

DRAWING NUMBER

7889 / SK02

SCALE at A2

1:250

DATE

31.03.23

DRAWN

PW

CHECKED

AJ

REVISION

-