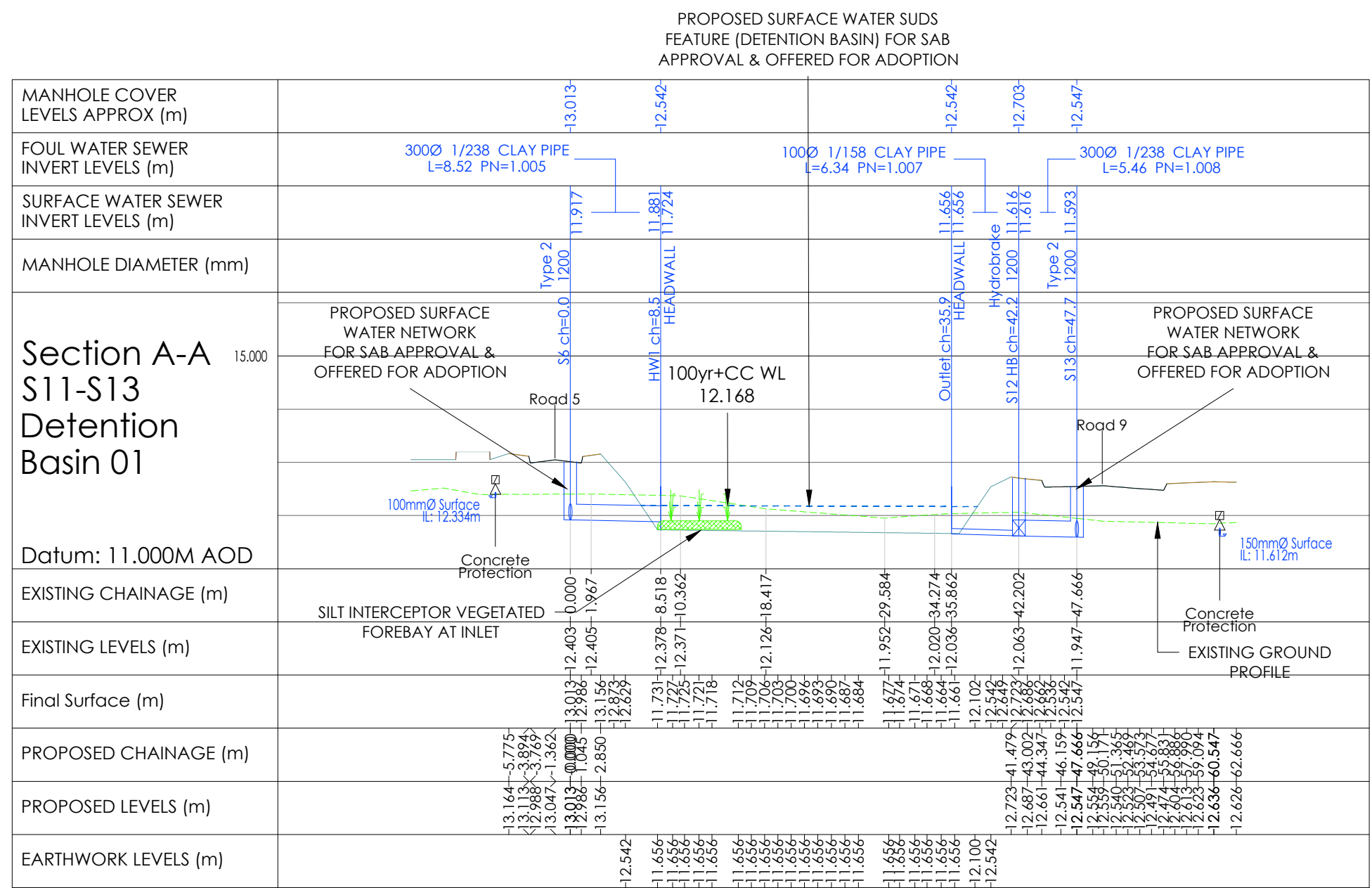
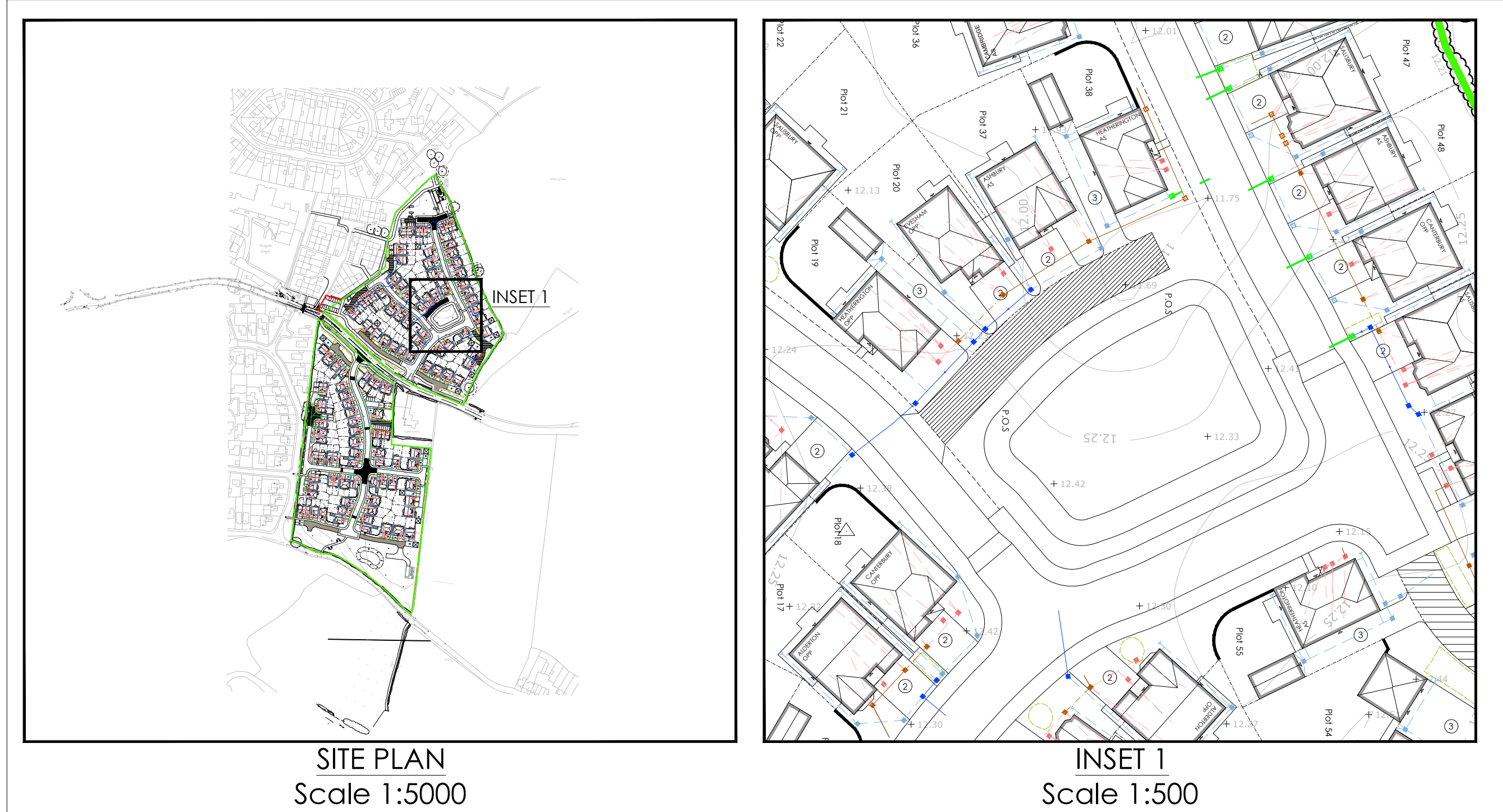
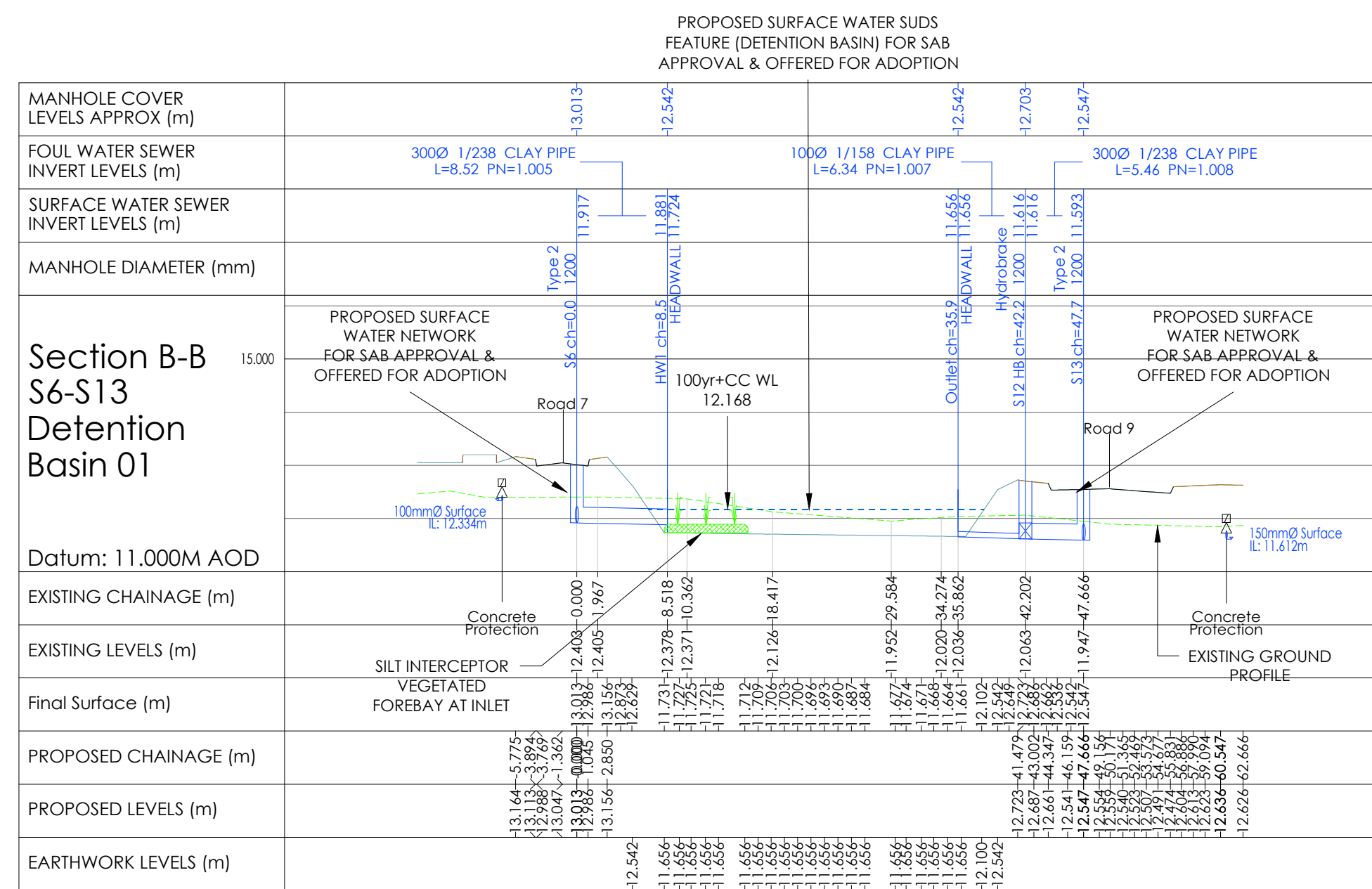
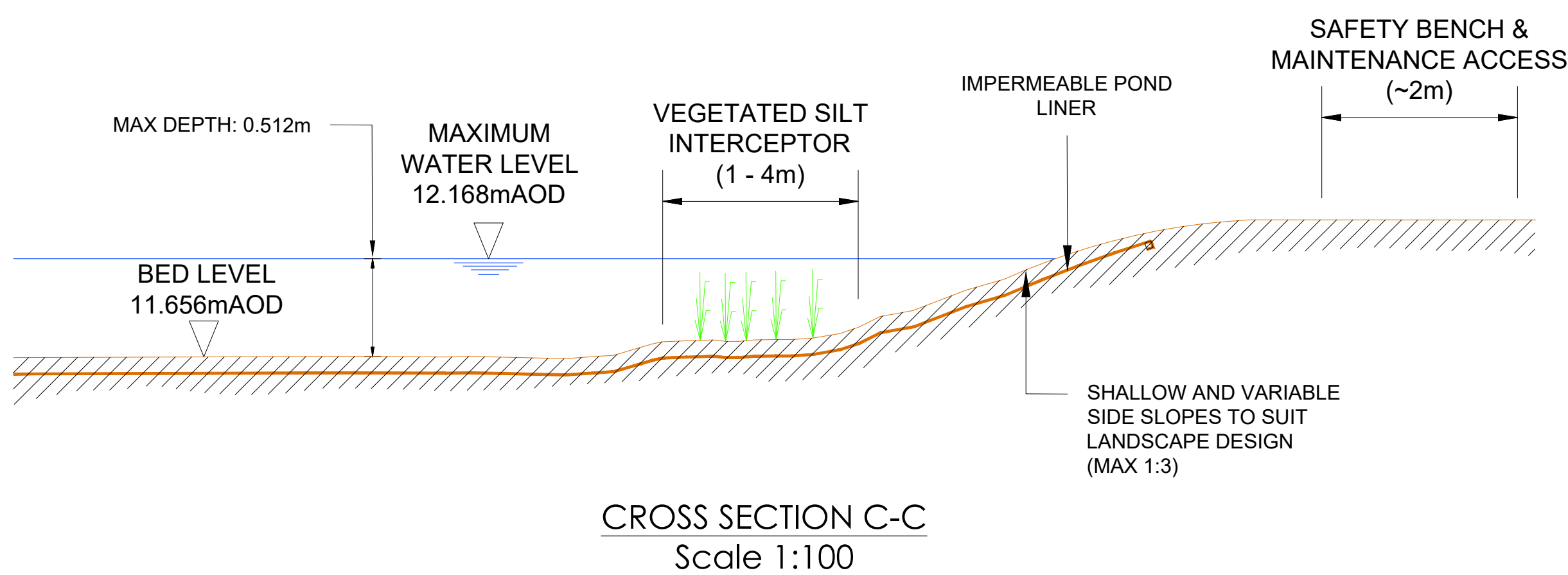
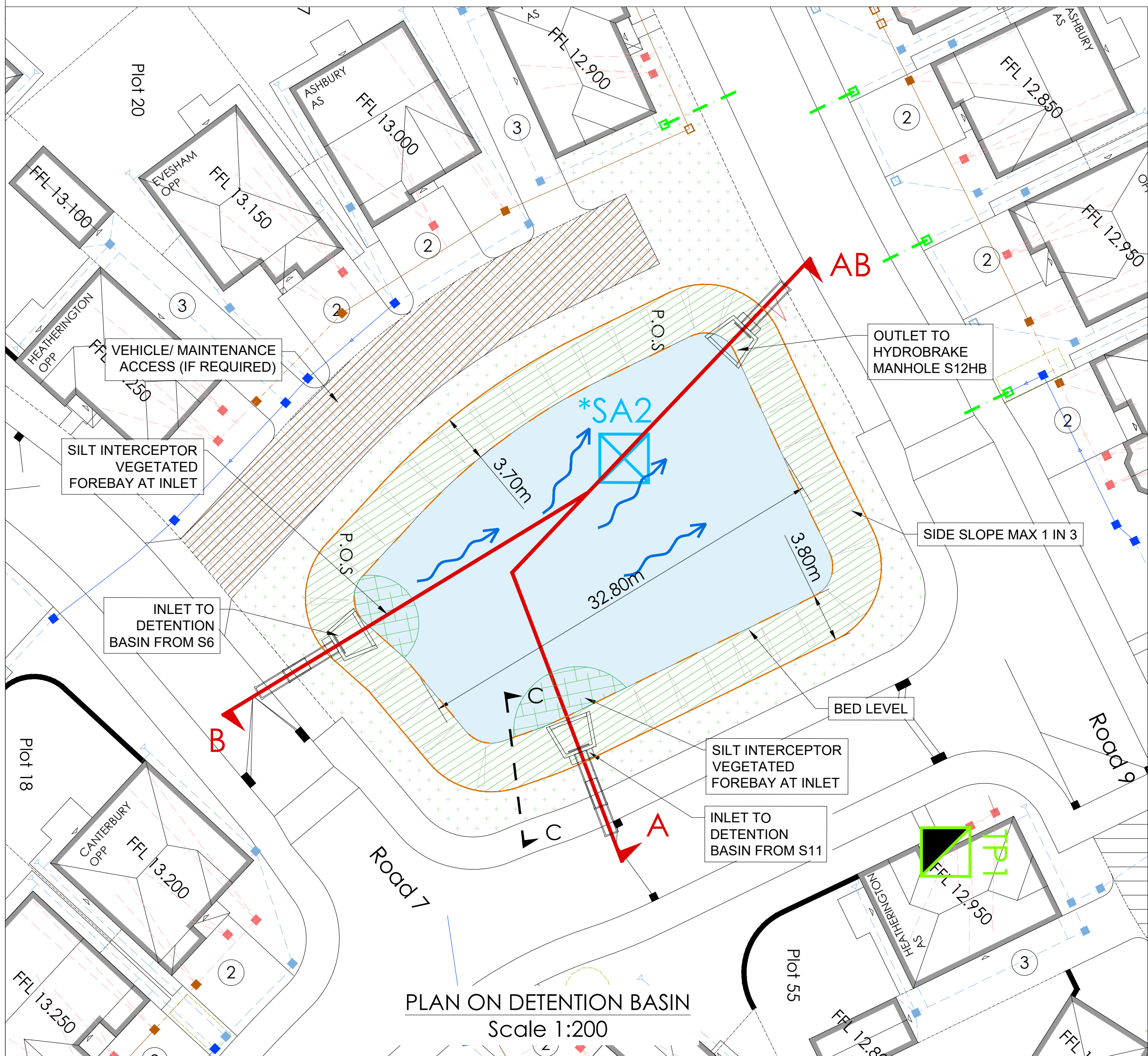




LONG SECTION A-A Scale 1:500H:1:100V



LONG SECTION B-B Scale 1:500H:1:100V



Detention Basin

Key Design Standards

- Silt and pollution must be removed upstream in source control features.
- An inlet flow spreader is required to distribute flows across the basin ideally using a widening grass channel inlet.
- The base should be laid to slight fall of between 1 in 100 and 1 in 200 along the basin to the outlet headwall.
- Side slopes to the basin should be 1 in 3 maximum with clear access for maintenance.

Basin Details

Perimeter Level: 12.542 m AOD
Perimeter Area: 655.22 m²

Basin Bed (invert) Level: 11.656 m AOD
Basin Bed Area: 436.23 m²

Infiltration Coefficient: 0.0468 m/hr (1.3E⁻⁵) - **SA2***

Maximum Water Level: 12.242 m AOD
Depth: 0.586 m
Freeboard: 0.300 m
Total volume of water to maximum water level: 305.442 m³

Simulated Water Level: 12.168 m AOD (Simulated)
Depth: 0.512 m
Freeboard: 0.374 m
Total volume of water to Simulated water level: 253.699 m³

Cut & Fill Volumetric Calculations :

Volumes of pond bed (invert) against original ground surface
Volume of Cut: 300.369 m³
Volume of Fill: 22.812 m³
Balance (of cut): 277.557 m³

C	09.10.23	Updated to reflect comments from SAB@Wrexham.	CP
B	25.07.23	Issue for SAB Approval	CP
A	20.02.23	Issue for SAB review and comment	CP
Mark	Date	Details	By

Revision history

Drawing originator:



Client:



Project title:

Rossett Road,
Rossett

Drawing title:

Sustainable Drainage (SAB)
Northern Land Parcel
Detention Basin Details

Scale: As Shown for the original size of A1

Drawn by: CP Checked by: NR Passed by: RA Date: Feb 2023

Drawing status:

For Approval

Job No:	Drawing No:	Project	Origin:	Volume	Level	Type	Discip.	Number	Revision:
CAS02	BET						C	109	C

Do not scale this drawing

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