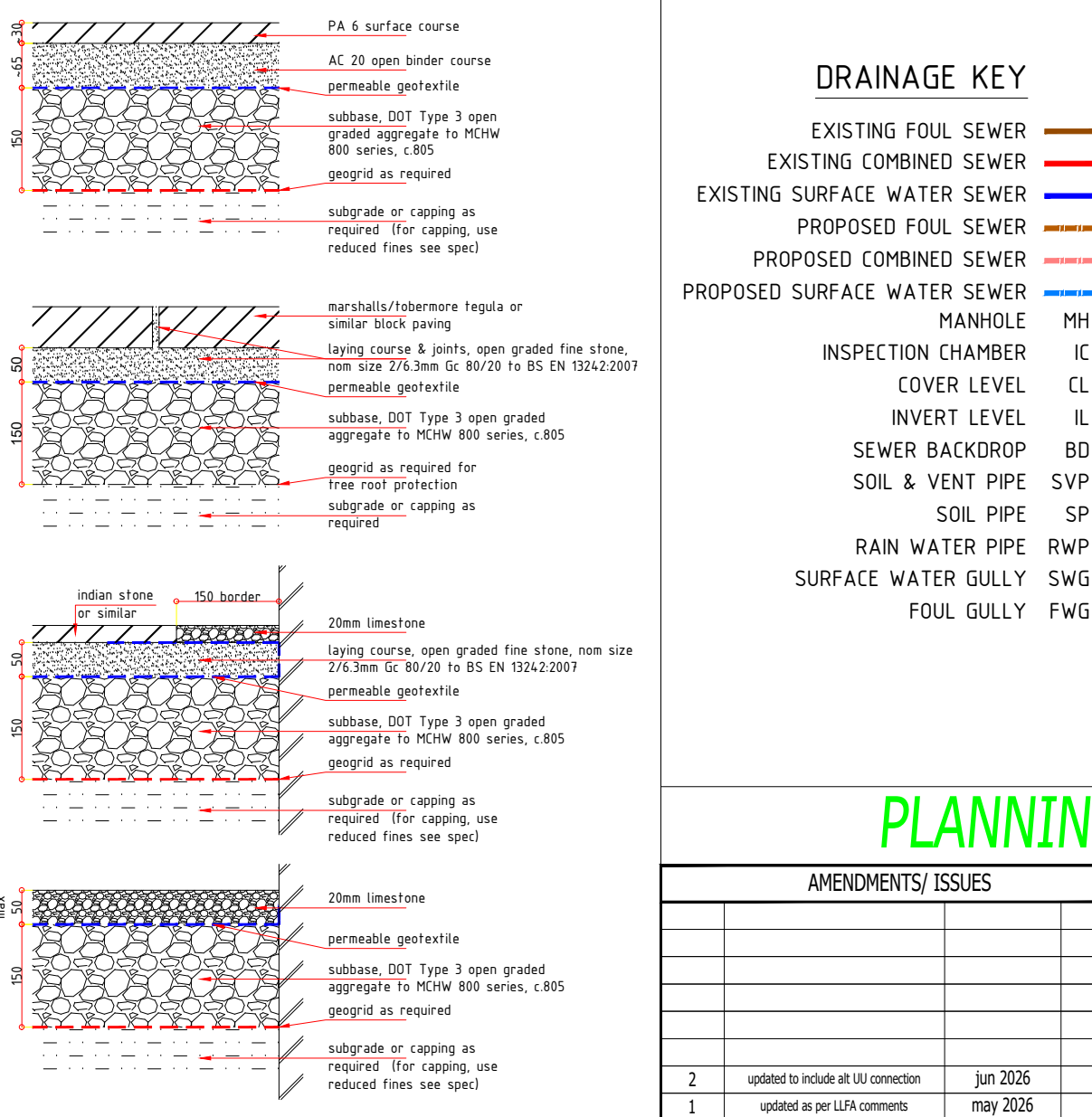
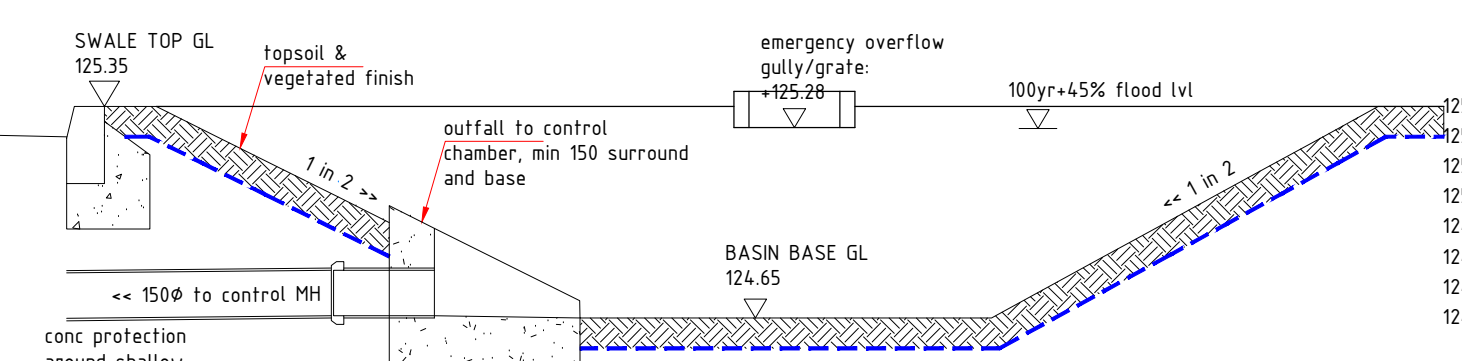
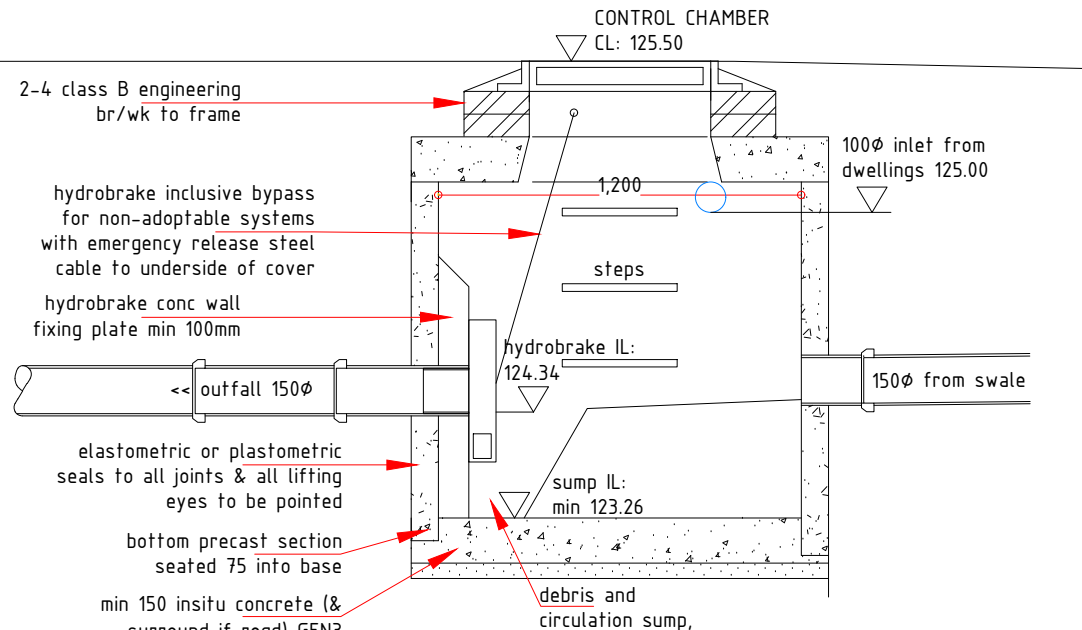
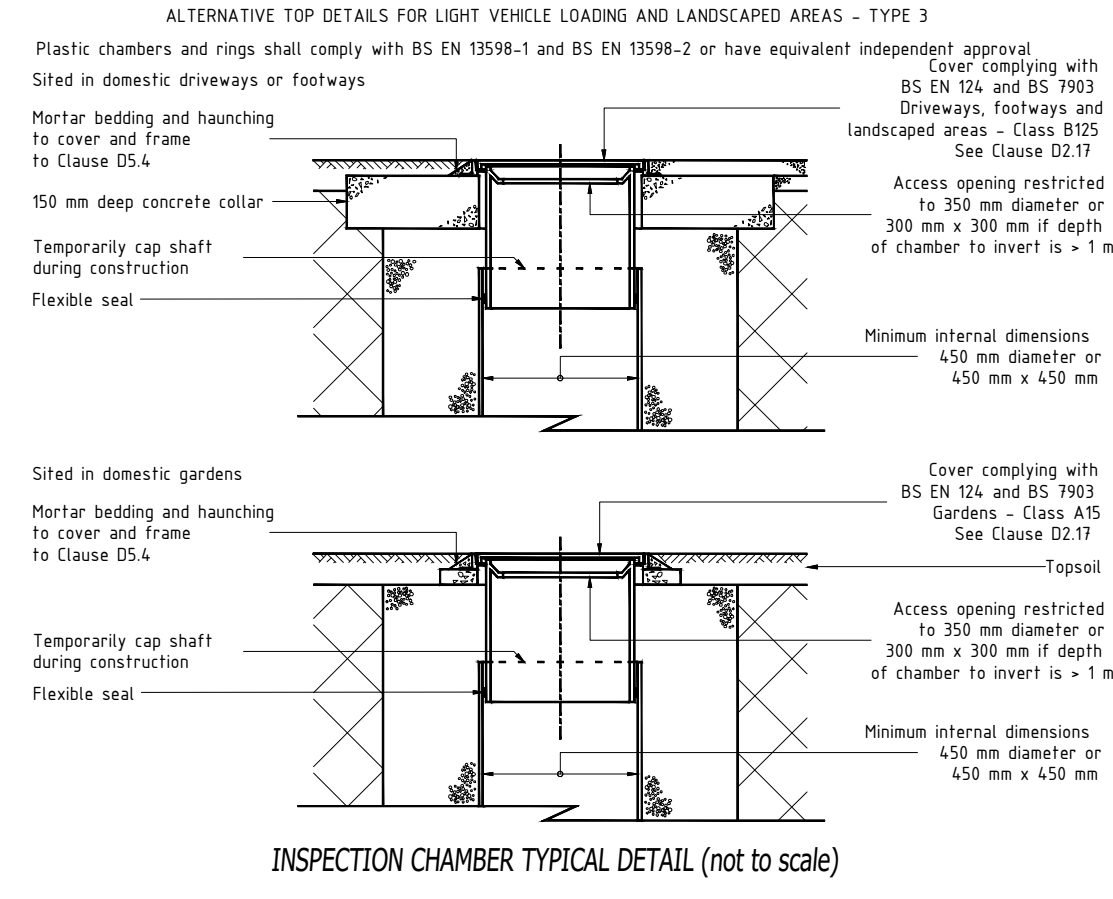
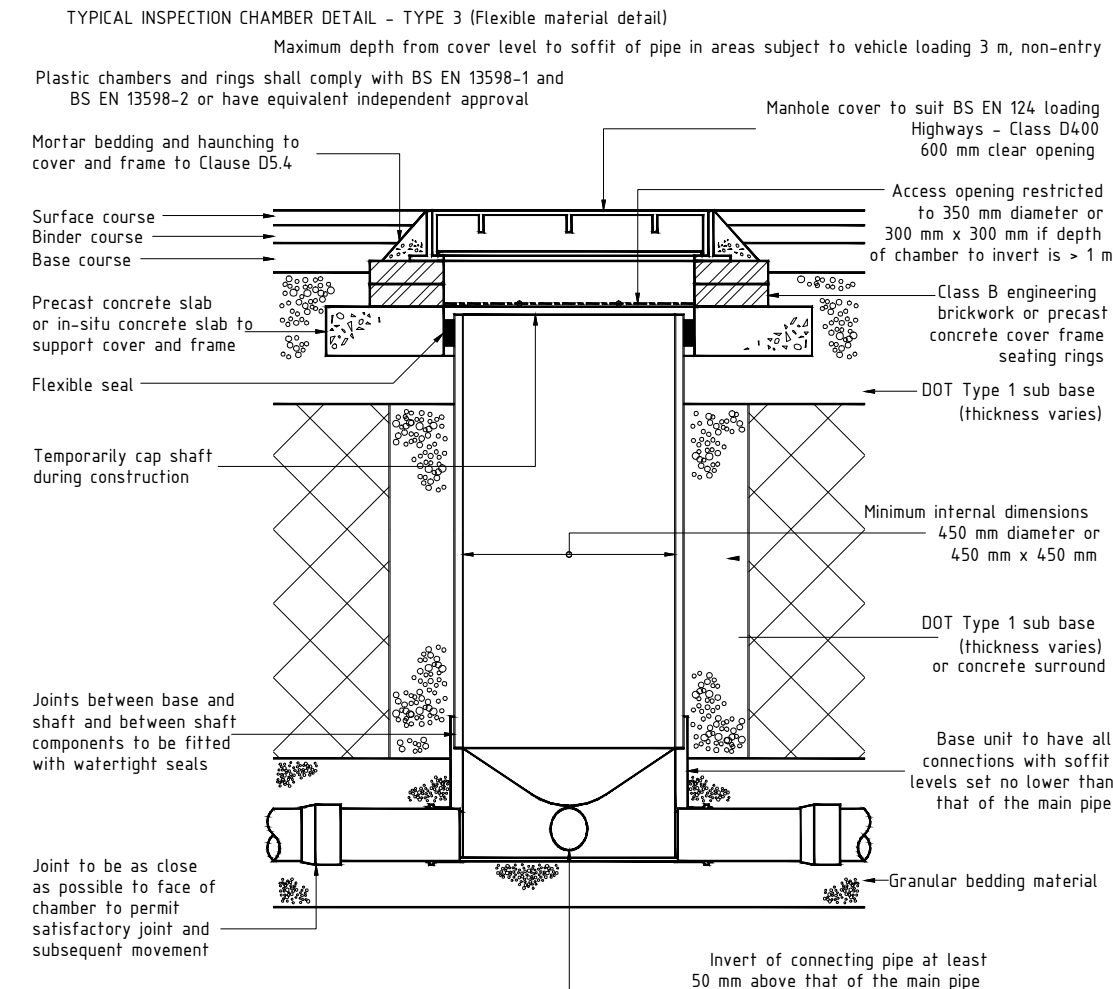
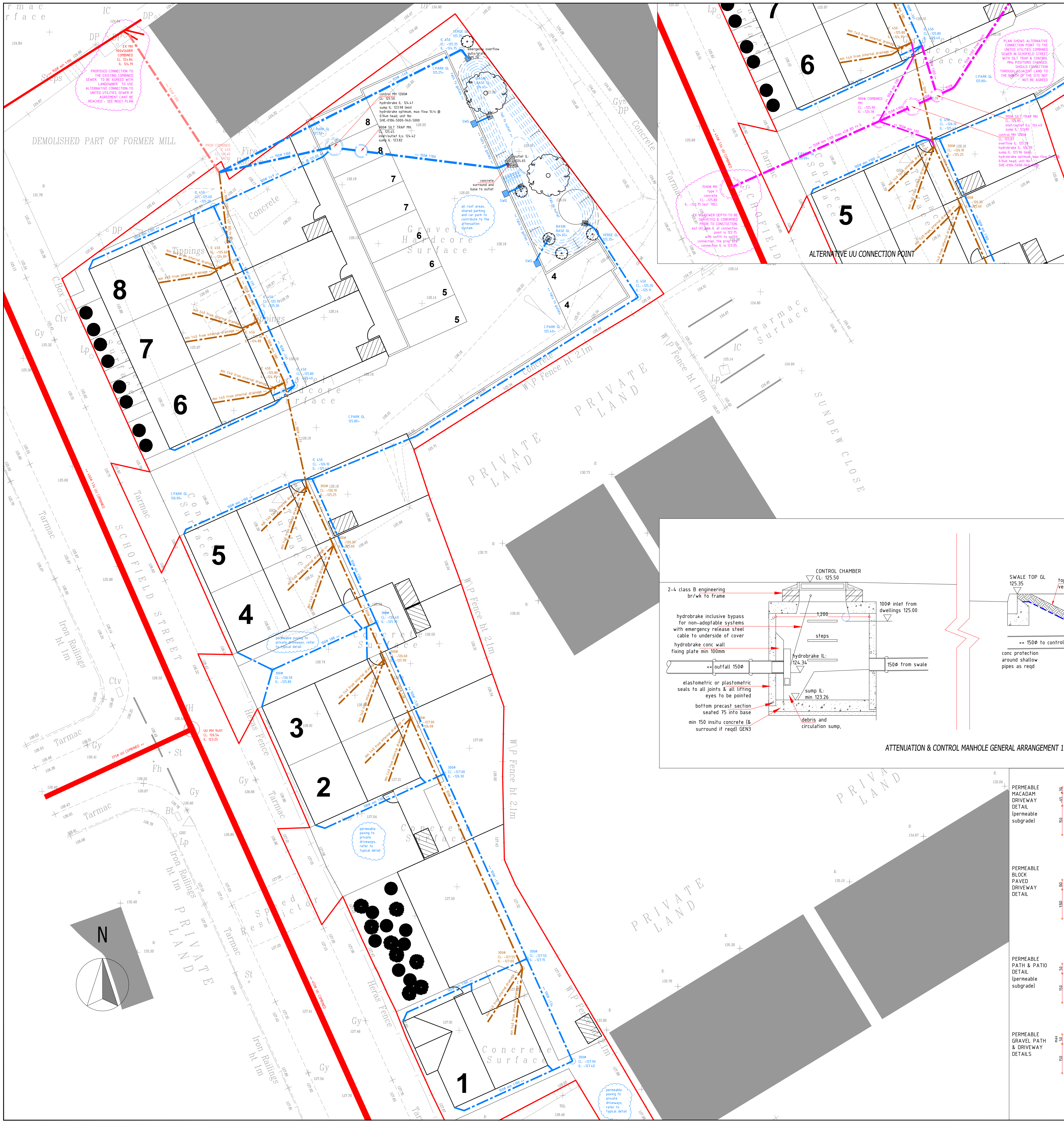




GENERAL NOTES

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0.1 THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT CONTRACTUAL DOCUMENTS.

0.2 All dimensions in mm unless stated.

0.3 All levels to SITE DATUM.

0.4 Refer to architects details for SBM.

0.5 Contractor to confirm SDF/SOL's prior to ordering material/ construction.

0.6 To not scale, the contractor must verify all dimensions prior to commencing shop drawings or work on site.

0.7 All work to be carried out in accordance with CDM 2015.

1.0 HIGHWAYS/ACCESS ROADS & PRIVATE DRIVES.

1.1 as per architects details.

2.0 DRAINAGE

2.1 To be read in conjunction with T J Booth Associates drainage calculations.

2.2 Manhole cover levels indicative only, to be adjusted to suit final finish levels.

2.3 Sewers/manholes to be constructed in accordance with the water authorities sewers for adoption (unless as applicable). B. Regs. Approved Doc. H, and BS EN 152-4.

2.4 Class S granular bed and surround to all new sewers.

2.5 Sewers must have min 150mm concrete surround if:

- adoptable assets with less than 12m of cover under highways or driveways;
- private assets with less than 900mm of cover under private roads;

2.6 All concrete including pipes and manholes to be sulphate resisting unless otherwise agreed in writing by eng.

2.7 Foul water must be to the following gradients in accordance with Brggs and Sewers for Adoption:

- 1000 at gradients not less than 180 where at least 1WC is connected and not less than 140 where no WC is connected.
- 1500 foul gradients to be not less than 150 with at least 5 WCs connected.

2.8 Surface water must be to the following gradients in accordance with Brggs:

- 1000 at gradients not less than 1100.
- 1500 foul gradients to be not less than 150.

2.8 Adoptable surface water must be to the following gradients in accordance with Sewers for Adoption:

- 1000 at gradients not less than 160.
- 1500 foul gradients to be not less than 1100.

2.9 No construction work to be undertaken on the United Utilities network unless approval granted under either S106 or S104 as appropriate.

3.0 MANHOLES

3.1 Manhole diameters to be in accordance with SFA clause 2.9.3, and according to largest manhole pipe diameter:

pipe dia	MH dia
<375	1200;
375-700	1500;
750-900	1800;

5.2 Rocker pipes (clause 5.6.6.2) to be the following lengths:

150-200mm	0.6m;
450-700mm	1.0m;
>750mm	1.25m;

5.3 Inspection chambers/manholes to have min 150mm granular surround in soft landscaping areas and not less than 150 conc surround to driveways/car parks.

3.3 Manhole covers and frames shall comply with the relevant provisions of bs. en 124 and shall be of non-sucking design which does not rely on the use of rubber inserts.

3.4 Cover sizes to be in strict accordance with adoptive undertakers standard requirements.

3.5 Cover strength (clause 5.7.1.1) comprising minimum strength for location as follows:

Roads/Highways	LA20 Vehicle Impact.
Car Parks	C120 Light Vehicle Loading.
Footway/Driveway	B125 Occasional vehicle loading.
Gardens	A15 Pedestrian & cyclist ONLY.

3.6 All manhole covers shall be the non-venting type (unless indicated otherwise) and shall have closed keyways.

3.7 Manhole frames (clause 5.6.7) to be set to level, bedded and haunched externally over the base and sides of the frame in mortar, in accordance with the manufacturers instructions. The frame shall be sealed on all joints with courses of class B engineering brick, on precast concrete masonry units or on precast concrete cover frame sealing rings to regulate the distance between the top of the cover and the top rung to no greater than 675mm. A mortar fillet shall be provided where the corners to an opening in a slab are chamfered and the brickwork is not flush with the edges of the opening.

NPFF HIERARCHY OF SURFACE WATER DISCHARGE OPTIONS

DISCHARGE TYPE	METHOD ADOPTED	REASONING
1. to the ground (infiltration)	NO	Site contaminated in former reservoir area. Soakaways unsuitable for the site, as agreed by the LLFA.
2. to a surface water body	NO	Not identified locally.
3. to a SW sewer, highway drain, or another drainage system	NO	Not identified locally.
4. to a combined sewer	YES	Combined sewers available on site is only suitable method.

IMPLEMENTATION SCHEDULE FOR DRAINAGE SYSTEMS, ATTENUATION SYSTEMS & SOAKWAYS

PHASE	ACTION	REASON
Construction phase	All drainage pipes, gullies & manholes installed must be either covered, plugged or connections capped to isolate from construction SW flows.	To ensure construction debris does not enter the system while allowing general construction of the drainage system ready for plot completion.
Pre-habilitation phase	Only finished plots & associated drainage pipes, manholes & gullies may be brought online as long as they will not be subject to further construction flows & debris from upstream works.	To ensure adequate drainage of completed parts of the Site, while protecting the wider drainage system to parts of the Site still under construction from potential blockages.
Post Construction Phase	Site attenuation system, control chamber, hydrobrake or soakaways may only be brought online after construction of the Site has finished, and construction debris and silt entering the system is mitigated.	To ensure protection of the attenuation system & hydrobrake, and to ensure they are not subject to SW flow overload with silt/debris which could damage or reduce long term storage capacity.
Remedial actions	All silt traps, control chambers and accessible soakways to be checked for silt/debris, and cleaned accordingly.	To ensure the system is free from silt/debris accumulation prior to sign off.

CR13 TABLE 22.1 OPERATION & MAINTENANCE REQUIREMENTS FOR DETENTION BASINS

MAINTENANCE SCHEDULE	REQUIRED ACTION	TYPICAL FREQUENCY
Regular maintenance	Remove litter and debris	Monthly
	Cut grass - for spillways and access routes	Monthly (during growing season), or as required
	Cut grass - meadow grass in and around basin	Twice yearly (spring - before nesting season, and autumn)
	Manage other vegetation and remove nuisance plants	Monthly (at start, then as required)
	Manage inlets, outlets and overflows for blockages, and clear if required	Monthly
	Inspect bankside, structures, pipework/etc, for evidence of physical damage	Monthly
	Inspect inlets and facility surface for silt accumulation	Monthly (for first year), then annually or as required
	Establish appropriate silt removal frequencies	Annually
	Check any penstocks and other mechanical devices	Annually
	Top all dead growth before start of growing season	Annually
	Remove sediment from inlets, outlet and forebay	Annually (or as required)
	Manage wetland plants in outlet pool - where provided	Annually (set out in chapter 23)
Remedial actions	Re-seed areas of poor vegetation growth	As required
	Prune and trim any trees and remove cuttings	Every 2 years, or as required
	Remove sediment from inlets, outlets, forebay and main basin when required	Every 5 years, or as required (likely to be minimal requirements where effective upstream source control is provided)
Remedial actions	Repair erosion or other damage by re-seeding or re-turfing	As required
	Repair/rehabilitation of inlets, outlets and overflows	As required
	Relevel uneven surfaces and reinstated design levels	As required

LOCATION PLAN 1:1250

PLANNING

AMENDMENTS/ISSUES

REVISION	REASON/CHANGE	DATE	BY
2	updated to include all UU connection	Jun 2026	ds
1	updated as per LIA comments	may 2026	ds
0	original for planning	aug 2025	ds

FILE NAME: dwg-tjb-B&L-schofield-st-040825.dwg

SCALE: 1 : 150 & as indicated @ A1

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DRAINAGE PLAN & DETAILS