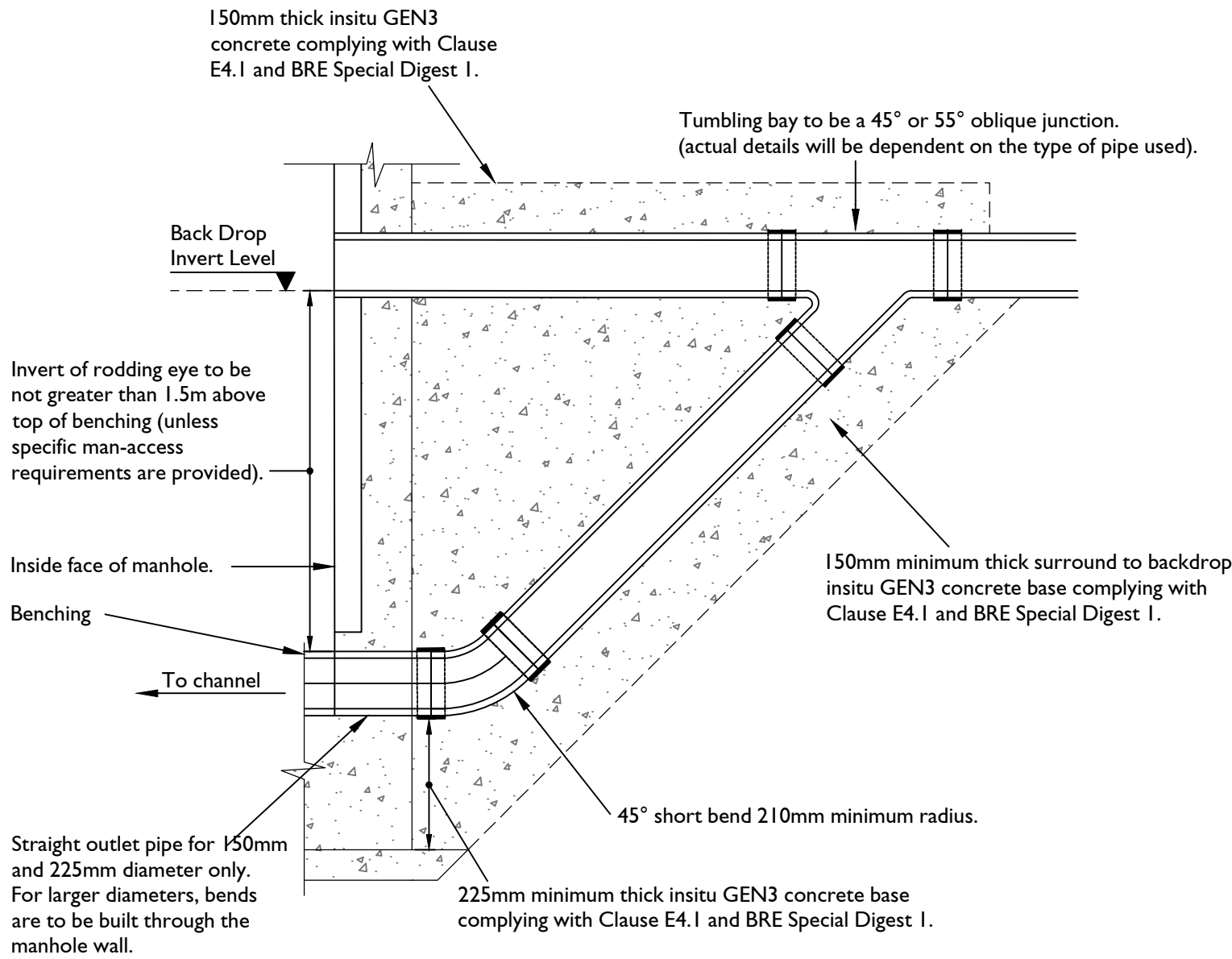
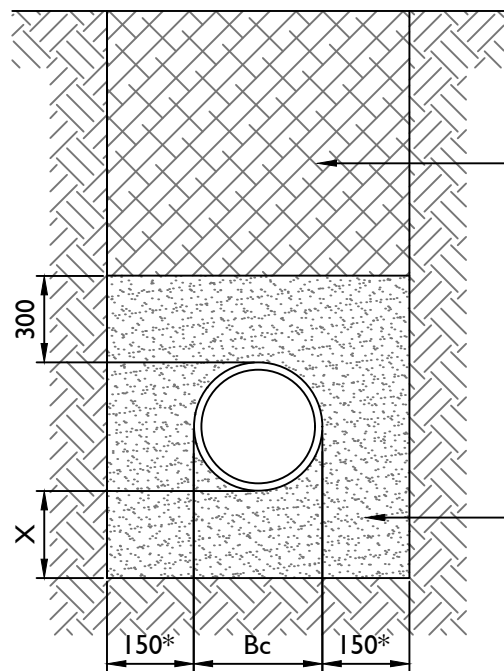


NOTES

1. This drawing should be read in conjunction with other Section 104 Drainage Construction Details, Foul and Surface Water Water Sewer Longitudinal Sections (CIV-4100 to 4110), Section 104 Drainage Layout (CIV-4391), Foul Water Sewer and Surface Water Sewer Manhole Schedules (CIV-4310 to 4311), Domestic Drainage Layouts (CIV-4351 to 4355).
2. All dimensions are in millimetres unless stated otherwise.
3. Do not scale from this drawing. Only written dimensions are to be used.
4. 100mm & 150mm diameter pipework to be extra strength vitrified clay to BS EN 295 or BS 65 on Class S bed & surround.
5. 225mm diameter pipework to be extra strength vitrified clay to BS EN 295 or BS 65 or concrete Class M to BS5911 on Class S bed & surround.
6. 300mm diameter and greater pipework to be concrete Class M to BS5911 on Class B bed.
7. All construction to be in accordance with SSG Appendix C Design and Construction Guidance Approved v2.3 dated November 2023 and the specific requirements of IWNL Water.
8. Refer to geotechnical report for sulphate resisting class and ACEC class.
9. *Outgoing pipes greater than 600mm diameter should be fitted with guard bars, safety chains [to BS EN 818-3] or other safety devices in accordance with the IWNL Water safety policy.*
10. *In the event that Barratt Homes and the on-site contractor have a preference as a business to use plastic pipes instead, then confirmation from the supplier should be obtained that the guarantee of the product is not affected considering the ground reports. They must comply with the following requirements for plastic pipes:*
 - SSG Appendix C Design and Construction Guidance Version 2.3 dated November 2023 Clauses E2.21, E2.22 & SN8;
 - Solid Wall PVC-U to BS EN 1401;
 - Spiral Wound Welded HDPE to EN 13476 Parts 1 & 2;
 - Structure-wall Thermoplastic to EN 13476 Parts 1 & 3;
 - Polypropylene to BS EN 1852.



Backdrop Construction Detail
45° External Backdrop Preferred Style Where Space Permits
Based on Figure B16 - SSG Appendix C Design and Construction Guidance v2.2



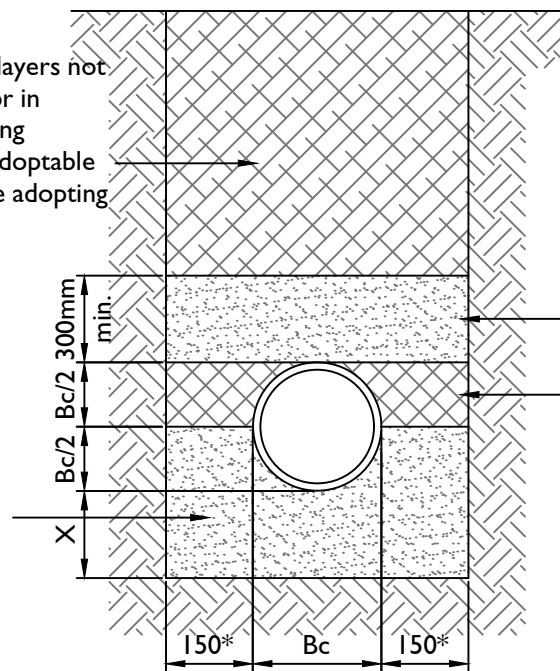
Class S Surround

* = 150mm for pipe diameters up to 300mmØ and 200mm for larger pipes.

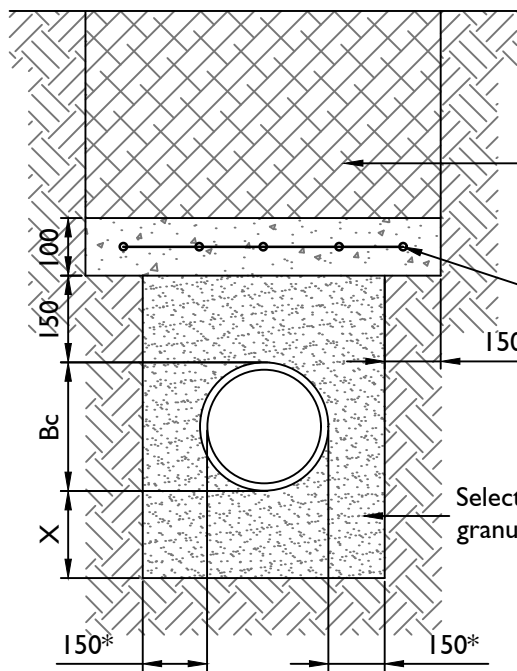
Bc = outside dia. of pipe X= 100mm min. for pipes 100mmØ or less, 150mm min for larger pipes or 200mm for trenches in rock.

Concrete to be Grade C16/20 placed in one operation. Where pipes with flexible joints are used, concrete protection shall be interrupted over its full cross section at each joint by a shaped compressible filler.

Concrete to sulphate resisting class DS-I of Table C2 of BRE Special Digest 1:SD1 Part C (2005) ACEC class AC-I-s



Class B Haunch

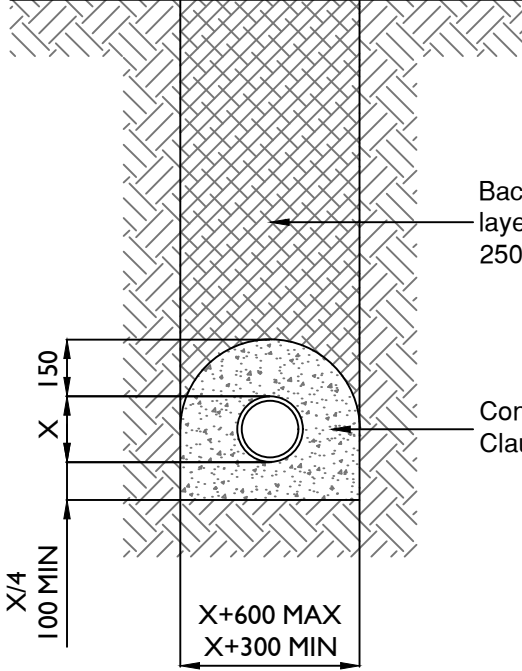


Reinforced Concrete Slab

(Use subject to Adopting Authority's Preference)

To be provided where the minimum depth of pipe cover to the crown of gravity pipes is less than:

- domestic driveways, parking areas and yards with height restrictions to prevent entry by vehicles with a gross weight in excess of 7.5 tonnes, 0.5m;
- domestic driveways, parking areas and narrow streets without footways (e.g., mews developments) with limited access for vehicles with a gross weight in excess of 7.5 tonnes, 0.9m;
- other highways and parking areas with unrestricted access to vehicles with a gross vehicle weight in excess of 7.5 tonnes, 1.2m.



Type Z Bed Detail

(For use on private drainage only)

1. All dimensions are in millimetres.
2. Dimension 'X' is the external diameter of the pipe.
3. The minimum or maximum width of the trench applies on and below a line 300mm above the outside top of the pipe. Above the 300mm line the trench backfill material shall be described as Clause 505 of SHW.
4. The concrete bed or surround may extend to the sides of the trench or be of minimum width. Class 8 material is to be used to fill any voids so formed.
5. For Type Z trench the concrete cover may be formed to a radius batter or horizontal surface. Minimum cover of concrete shall be 150.

**SUBJECT TO PLANNING
APPROVAL**

CDM NOTES

1. **EXISTING SERVICES:** Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below the sub-base.

CHAMBER DIAMETERS		CRITICAL PIPE LENGTHS		BEDDING MATERIAL SIZE		
PIPE SIZE mm	CHAMBER DIAMETER mm	(for entering and leaving manholes) First joint as close as practicable		NOMINAL DIAMETER mm	SINGLE SIZE mm	GRADED mm
< 375	1200	150 to 600 601 to 750 750 and over	0.6 1.00 1.25	100 to 125	10	-
375-450	1350			150 to 200	10 or 14	14 to 5
500-700	1500			225 to 300	10,14 or 20	14 to 5 or 20 to 5
750-900	1800			375 to 500	14 or 20	14 to 5 or 20 to 5
> 900	Pipe Diameter + 900			>500	14,20 or 40	14 to 5 or 20 to 5 or 40 to 5
VITRIFIED CLAY PIPES to be to extra strength to BS EN 295 or BS65 size as shown on section drawing. Refer also to Clauses E2.18.1 & E2.18.2.						
CONCRETE PIPES to be to BS5911 Class of pipe and size as shown on section drawing. Refer also to Clauses E2.9.2, E2.29, E2.19.1 & E2.19.3.						

Pipe Bedding Details

Rev Note

Scale @ A1:

Not to Scale

Rev Date Drawn Checked Authorised

Date: JUNE 2025

Drawn by: AD

Checked by: JC

Authorised by: TRS

Org No: CIV-4319

Rev:

Project: Crawley Down Road,
Felbridge

Title: S104 Drainage Construction Details
Sheet 2

Client:

