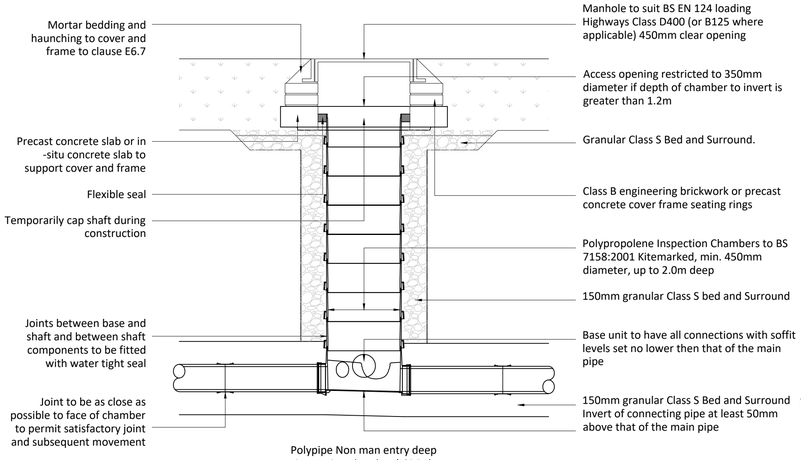
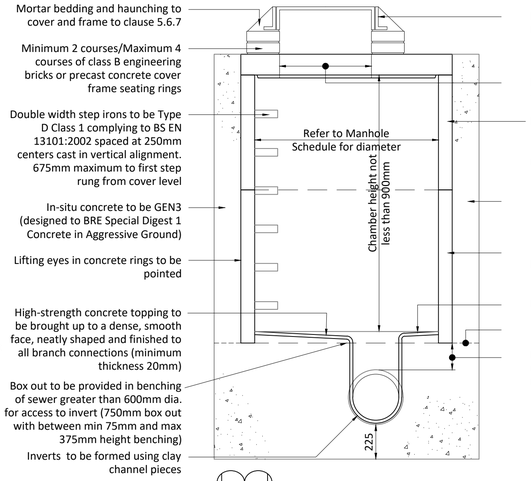
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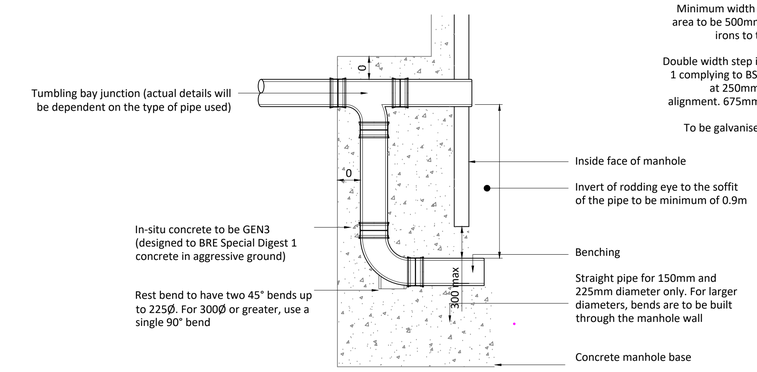


Polypipe Non man entry deep inspection chamber (ICDB1)

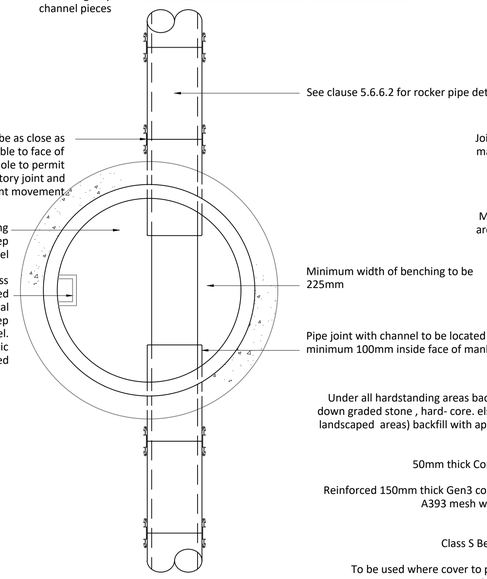
TYPICAL INSPECTION CHAMBER FOR LANDSCAPING / NON VEHICULAR DETAIL TYPE E

Maximum depth from cover level to soffit of pipe in areas subject to vehicle loading 3m, non-entry



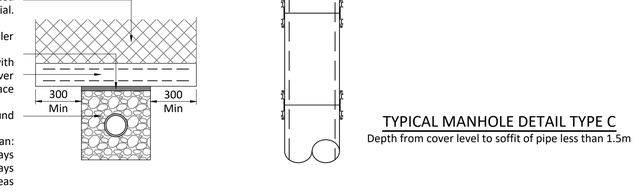


Typical External Backdrop Detail



TYPICAL MANHOLE DETAIL TYPE B

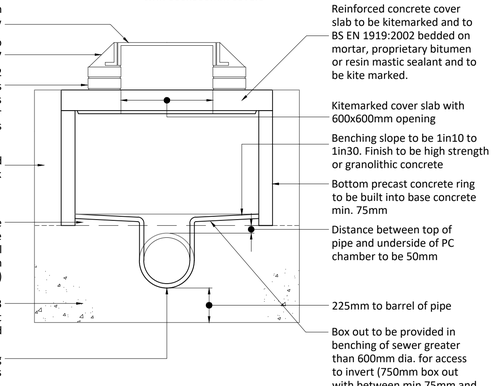
Depth from cover level to soffit of pipe 1.5m to 3m



CONCRETE SLAB PROTECTION TO ADOPTABLE DRAINAGE

TYPICAL MANHOLE DETAIL TYPE C

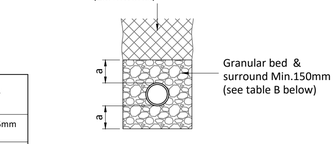
Depth from cover level to soffit of pipe less than 1.5m



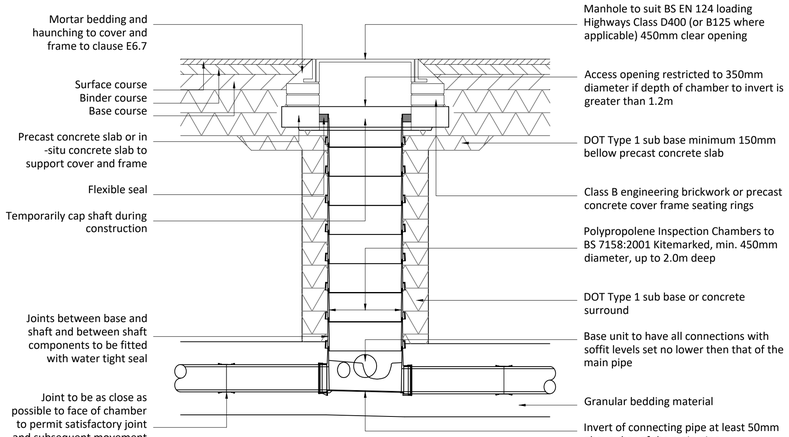
PIPE NOMINAL BORE (DN)	MAX. PARTICLE SIZE (mm)	CLASS OF BEDDING	SUITABLE IMPORTED GRANULAR MATERIALS
100 dia	10	S	10mm NOMINAL SINGLE-SIZED OR 10mm TO 5mm GRADED.
OVER 100 TO 150 dia	15	S	max 14mm NOMINAL SINGLE-SIZED OR 14mm TO 5mm GRADED.
OVER 150 TO 600dia	20	S	max 20mm NOMINAL SINGLE -SIZED OR 20mm TO 5mm GRADED.
OVER 600	40	S	max 40mm NOMINAL SINGLE-SIZED OR 40mm TO 5mm GRADED.

TABLE B.

CLASS `S` PIPE BEDDING DETAIL



DIMENSION a :- in rock or material containing hard spots sleeved jointed pipes - 150mm min. socketed pipes - 200mm min. elsewhere sleeved jointed pipes - 150mm min socketed pipes - 150mm min.



Polypipe Non man entry deep inspection chamber (ICDB1)

TYPICAL INSPECTION CHAMBER DRIVEWAY / VEHICULAR DETAIL TYPE E

Maximum depth from cover level to soffit of pipe in areas subject to vehicle loading 3m, non-entry

Kirklees Highways Notes

All oversize precast concrete manhole circular vertical units and cover slabs including all ancillary concrete products are in full compliance with "**BS EN 1917" & "BS 5911-3+A1"**

Contractor to confirm Design Chemical Class (DC-Class) of concrete in the precast concrete manhole circular vertical units and cover slabs including all ancillary concrete products for an intended working life of 100 years (min).

All precast concrete manhole shaft units, circular cover, reducing, landing and corbel slabs together with all other ancillary concrete units intended for installation in the highway are marked with **"BS EN 1917" & "BS 5911-3" R** to confirm that the products represent a manufacture's declaration that their products meet the requirement of these standards.

Cover slabs are to be installed with a minimum of 300 mm cover to finished levels to comply with National Specifications.

This plan No 1030 C1 is the same as the Technically Accepted (Plan No 1030 P6), but the reference number has changed to allow issue to site

Do Not Scale

DESIGN REVIEW

Design review by:	**	Checked by:	**

Residual hazards:

Health, Safety & Environmental Notes

NOTES

Yorkshire Water Notes

1. All adoptable sewer works and material to be in accordance with Design and Construction Guidance (**Code for Adoption**). The Relevant British/European and Yorkshire Water's Standards/Requirements/Addendum to the Mechanical and Electrical Specification and Kitemarked.

2. Manhole covers shall/must have a clear opening of 600mm and shall be Class D400 to BS EN 124 with 150mm deep frames in highways.

3. Filled ground must be filled and consolidated under the supervision and to the satisfaction of Yorkshire Water before any sewer works are carried out.

4. Yorkshire Water is **not** obliged to accept filter drain/land drainage run-off into the public sewer network or adoptable drainage system (**directly or in-directly**). An alternative method of disposal of the land drainage run-off will therefore be required and you will have to liaise with the Local Authority, Land Drainage Section with regard to the disposal of the filter drain/land drainage run-off.

5. The adoptable sewers should be a minimum of 1m and manholes 0.5m from kerb faces and service margins.

6. Sewers must have 5 metres clearance from trees and hedges or the width of the canopy at mature height.

7. Sewers to be laid in Class "S" Bedding (**150mm granular bed and surround**). Where depth of cover to top of the sewer is less than 1.2m in highways and verges (**or less than 900mm in none vehicular access areas**) then a concrete slab should be provide above granular bed and surround.

8. There must be enough clearance at crossovers to accommodate bedding to both pipes, approx. 300mm : if crossover is near the rocker then the clearance needed may be increased".

9. Bedding and backfill material to conform to the requirement of Water Industry Specification 4-08-02 (**Table A2**).

10. Yorkshire Water policy is that Type "C" brick manholes and 1050mm diameter manhole rings are not preferred. Instead, it is preferred that you use a type "B" manhole with 1200mm diameter or 1500mm diameter rings, with the opening sited over the channel where depth of cover to pipe soffit is 1 - 1.5m.

11. Adoptable plastic sewer pipes to be BSI Kitemarked (**certified to WIS 4-35-01 and BS/EN13476**). Adoptable plastic sewer pipes to be laid in maximum 3 metre lengths unless there is a specific operational need to lay longer lengths. Plastic channel sections in manholes are not acceptable and Yorkshire Water would prefer clayware channel in manholes.

12. The minimum crushing strength for clay pipes should be as follows : 100mm dia. 40KN/m, 150mm dia. 40KN/m, 225mm dia. 45KN/m and 300mm dia. 72KN/m. The minimum crushing strength for concrete pipes should be - (**Class 120 to EN 1916/BS5911-1 2002**). Plastic pipes should conform to WIS 4-35-01 and BS EN13476.

13. Where a B125 cover and frame has been approved, this **must not** be coated in plastic and must have lifting eyes suitably sized to accommodate standard lifting keys. Screw down covers are not acceptable.

Date	Description	By	Chk	Rev
05.10.22	Issued for construction	JZG	AL	C1
07.09.22	Box out note moved as requested	JZG	AL	P6
11.07.22	Toe removed, notes matched to YW details	JZG	AL	P5
10.06.22	YW comments addressed	JZG	AL	P4
17.05.22	Highway notes & YW ref added	JZG	AL	P3
14.03.22	Type C MH description corrected	JZG	AL	P2
16.02.22	Initial Issue	JZG	AL	P1

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Tel: 0161 974 3620 (Manchester)

Originating Office

Project
Newsome Road, Huddersfield

Title
Section 104 Drainage Details

Client
Urban Group

Scale @ A1	Initial author	Initial checker	Approver	Initial Date
1:20	JZG	AL	RP	02.22

Status	Purpose	Adept Ref
A	Construction	24.21001

Project Number	Originator	Volume	Level	Type	Role	Drg. No.	Rev.
24.21001	ACE	00	XX	DR	C	1030	C1