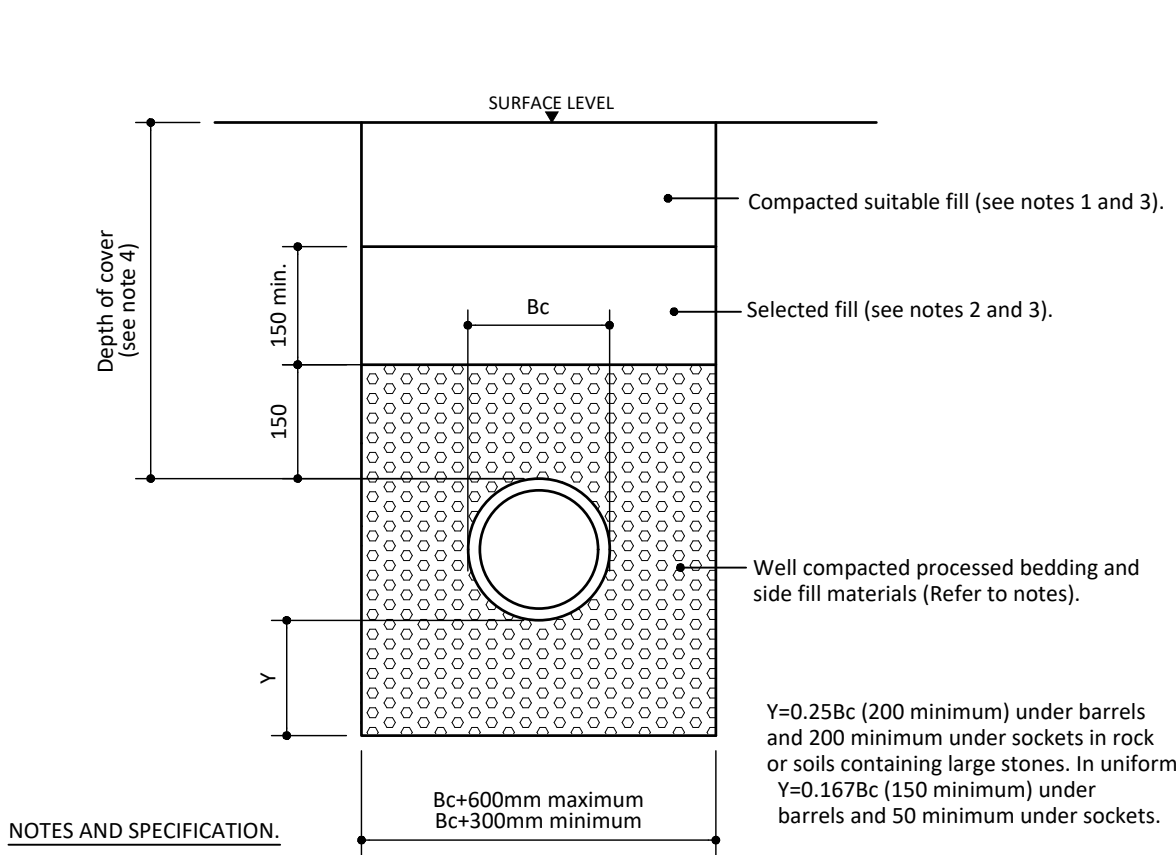


General Notes

1. All dimensions are in metres unless otherwise stated.
2. All levels are in metres.
3. This drawing is to be read in conjunction with all relevant Engineers and Architect's drawings, Specifications, Reports and Engineering Details.
4. Do not scale from this drawing.
5. For pipe bed & surround details refer to 'Design and Construction Guidance for foul and surface water sewers offered for adoption under the Code for adoption agreements for water and sewerage companies operating wholly or mainly in England ("the Code")' Section E5 - Construction of Gravity Sewers and Rising Mains

This drawing has been based/developed using the following external drawings					
Type	Company	Drawing date	Drawing title	Date received	Rev
Site Layout	Sidey Design	02/09/2024	Working 14-10-24	22/10/2024	
Topographical survey	Survey Solutions	29.06.2022	42018CVLS 01-02	29.06.2022	
OS Data	Ordnance Survey	19.12.2023	OS MAP EDIT	19.12.2023	
Existing Services	JPP Surveying	07.06.2024	28455Y_01	07.06.2024	
Landscaping	James Blake Associates	23.08.2024	23/231-01	28.08.2024	G

Agreement	Approval Granted
S104	NOT APPROVED
S106	NOT APPROVED



NOTES AND SPECIFICATION.

- Suitable fills shall be capable of accepting compaction plant subject to the Engineer's approval and shall exclude boulders, lumps of concrete, bricks, timber and vegetable matter.
- Selected fill shall be readily compatible material free from roots, organic material, building material, and shall be in an unfrozen condition. Selected fill shall exclude clay lumps exceeding 25mm size. Selected fill shall be carefully compacted around and above the pipe, taking care not to damage the pipe.
- Where the pipe is installed in areas which are paved or future settlement of back fills is not acceptable then back filling of the trench shall be carried out using type 1 sub-base to Highways Agency specification for Highway Works compacted to the same specifications.
- Minimum cover:
Cover shall be greater than:
1200mm to finished level of new main road pavements.
600mm in landscape areas, foot ways, gardens or fields
Otherwise use bridging slab if drainage is to be adopted by a Water Company.
- Rigid pipes shall be:
(i) Clay pipes with min FN of 40 to BS En 295 and BS65.
(ii) Concrete pipes to BS 5911 and BS EN 1916.
Concrete pipes shall not be used for foul sewers unless otherwise stated.
- Construction, subsequent testing, operation and maintenance shall be carried out in accordance with BS EN 752. Sewers to be adopted by water companies shall be installed in accordance with the current edition of 'Sewers for Adoption' produced by the Water Services Association. Sewers to be adopted by highway authorities shall be installed in accordance with the authority's specification.
- Workmanship shall be in accordance with BS 8000 - 14:1989

Rigid Carrier Drain - Class S Bedding, Surround and Backfill

NOTES AND SPECIFICATION

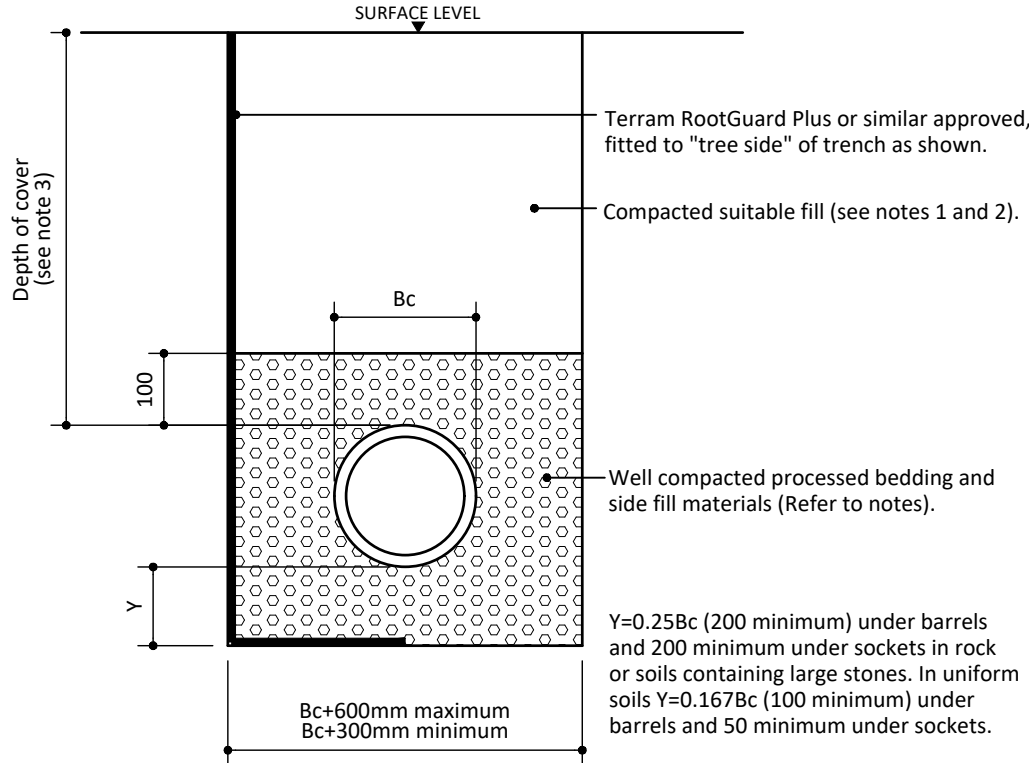
- Processed granular bedding and side fill materials shall include aggregates to BS882, air cooled blast furnace slag to BS1047, and lightweight aggregates to BS3797 and shall be graded as defined in the following tables:

TABLE 1

Pipe Nominal Size (mm)	Maximum Particle Size (mm)	Maximum CF Value	Material
100			10mm nominal single size
over 100 to 150	15	0.15	10 or 14mm nominal single size or 14 to 5mm graded.
over 150 to 300	20	0.15	10, 14 or 20mm nominal single size or 14 to 5mm graded or 20mm to 5mm graded.
over 300 to 550	20	0.15	14 or 20mm nominal single size or 14 to 5mm graded or 20mm to 5mm graded.
over 550	40	0.15	14, 20 or 40mm nominal single size or 14 to 5mm graded or 20mm to 5mm graded or 40 to 5mm graded.

- The sulphate content of bedding and side fill materials shall not be greater than 0.3% as sulphur trioxide.
- The above specification has been produced based on the Water Industry specification publication No. 4-08-01 (issue 4) February 1994.
- Compaction factor (CF) shall be determined in accordance with the water industry publication No 4-08-02 (issue 1) February 1994 - appendix B.

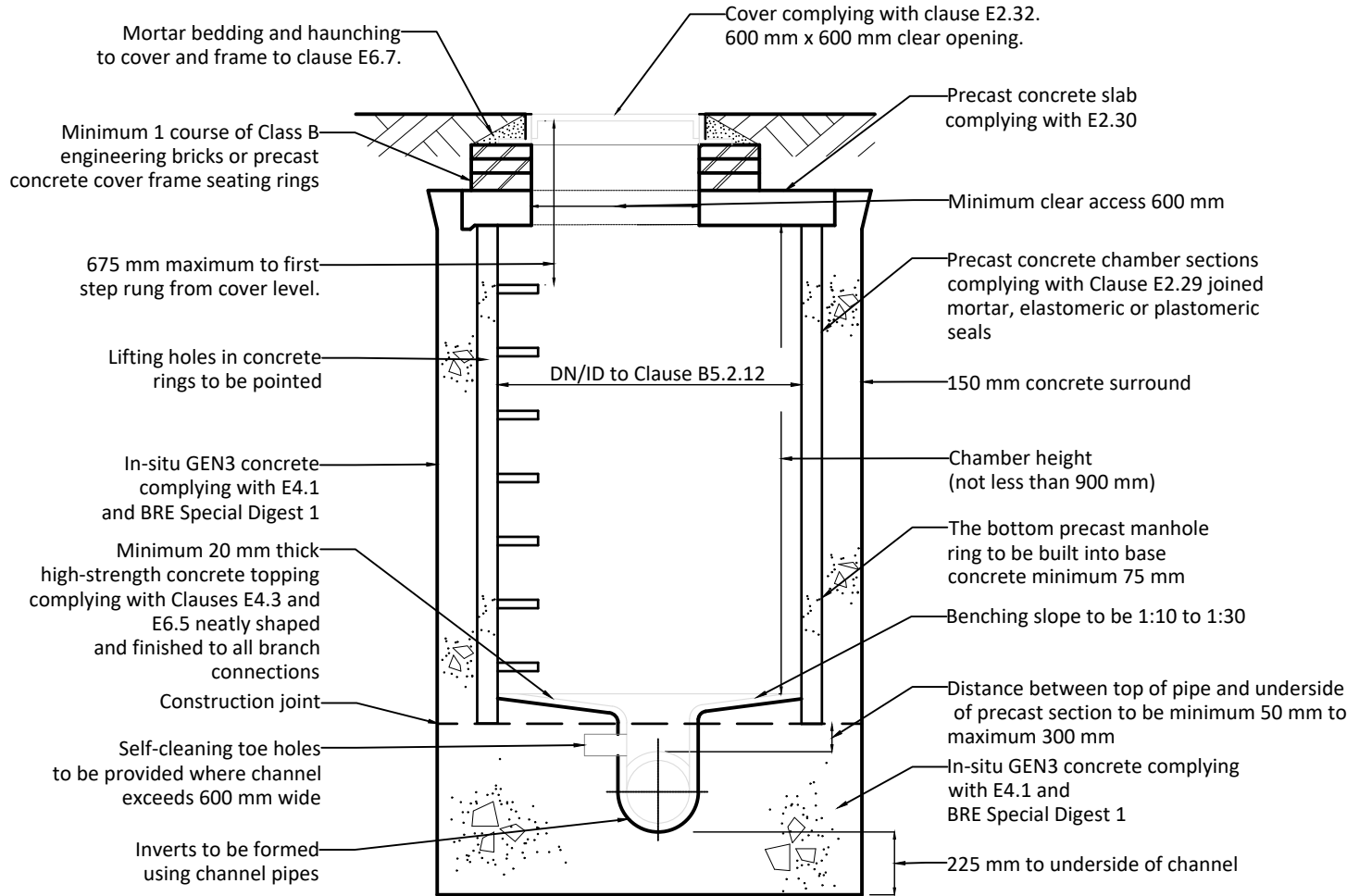
Specification For Bedding and Sidefill Materials For Rigid Pipes (Class S Bedding)



NOTES AND SPECIFICATION.

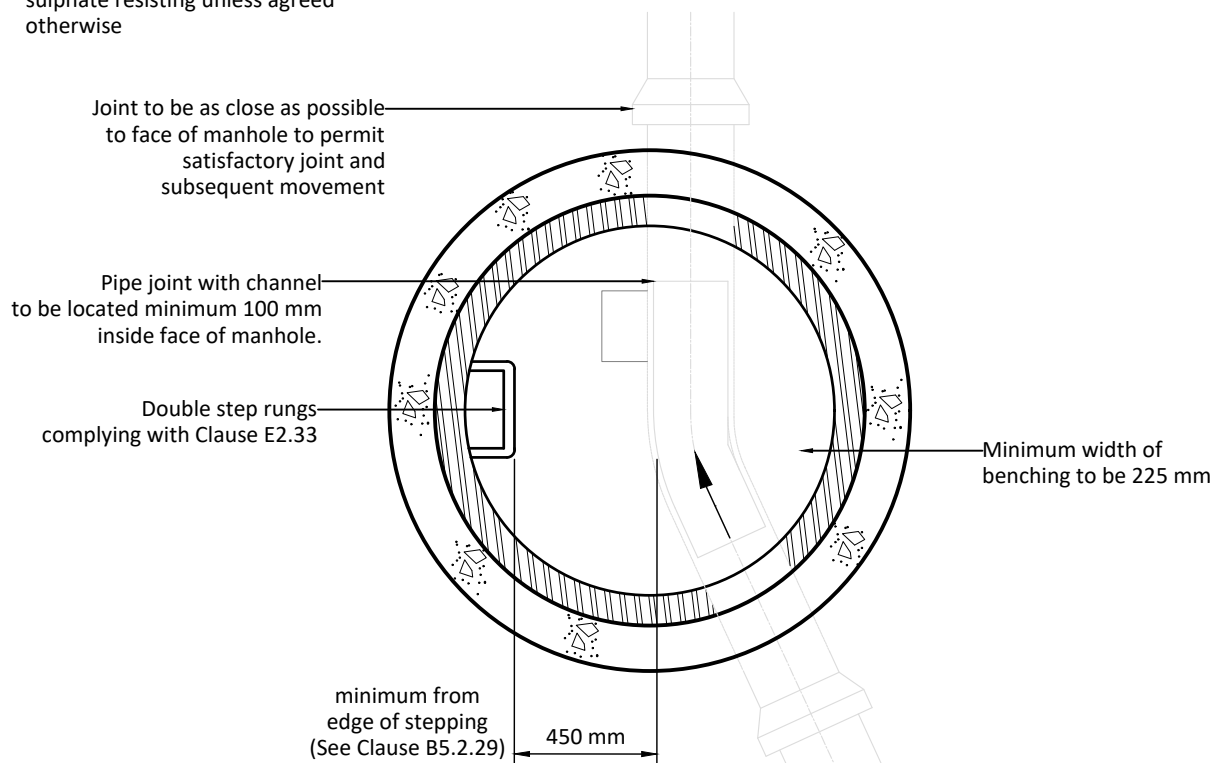
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- Workmanship shall be in accordance with BS 8000 - 14:1989

Rigid Carrier Drain Class S Bedding, Sidefill & Backfill With Root Protection



SECTION A-A

NOTE: All insitu concrete shall be sulphate resisting unless agreed otherwise



PLAN

Precast Concrete Manhole Type B
Depth from cover level to soffit of pipe 1.5 m to 3.0m
Alternative rigid material construction with concrete surround
(Figure B10)

Rev B Updated to show Construction status By OW Checked JTW 21.01.2025
Rev A Updated to show Tender status. By MR Checked PW 11.11.2024

jpp Northampton Grand Union Works, Whilton Locks, Daventry Northamptonshire, NN11 2NH T: 01604 781811 Poole & Milton Keynes E: mail@jppuk.net W: jppuk.net	Client	Wheatley PLC		
	Project	Proposed Residential Development Police Row Therfield		
Scale at A2 NTS Drawn by MR Checked by PW Date September 2024	Title	Adoptable Drainage Construction Details		
	Status CONSTRUCTION	Project ref 28613	Drawing no. 103	Revision B

JPP QA Document T07 R1

**DRAWINGS HAVE NOT BEEN APPROVED,
UNTIL THE DRAWINGS ARE APPROVED
THE DESIGNS AND DETAILS SHOWN ON
THIS DRAWING ARE SUBJECT TO CHANGE.**

**ANY WORKS UNDERTAKEN PRIOR TO
TECHNICAL APPROVAL IS ENTIRELY AT
THE CONTRACTORS RISK**

