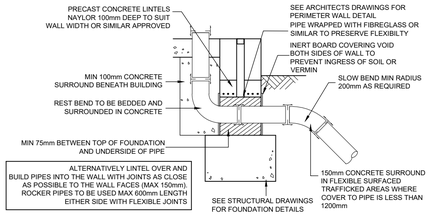
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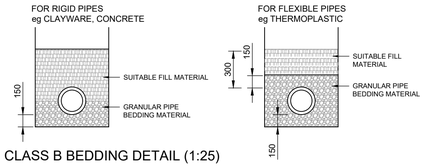
DO NOT SCALE OFF THIS DRAWING

Status: PRELIMINARY

No.	Revision	Date	Drwn



DRAIN PASSING OVER FOUNDATION (TYPICAL DETAIL) (1:25)

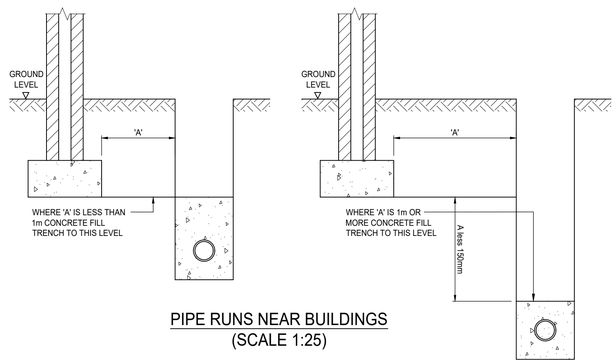


CLASS B BEDDING DETAIL (1:25)

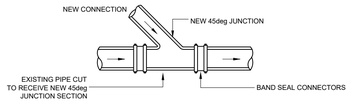
CLASS S BEDDING DETAIL (1:25)

SUITABLE FILL:- THE SUITABLE FILL SHALL BE SUITABLE FOR THE LOCATION AND SHALL BE CAREFULLY COMPACTED TO PROVIDE STABILITY WITHOUT DAMAGING THE PIPE. FILL UNDER CAR PARKING AREAS AND PRIVATE ROADS TO BE WELL COMPACTED GRADED MATERIAL. FILL UNDER ADOPTED ROADS TO BE TYPE 1 GRANULAR SUB-BASE.

WHERE THE PIPES ARE TO BE ADOPTED CLASS S BEDDING TO BE USED FOR EITHER RIGID OR FLEXIBLE PIPES



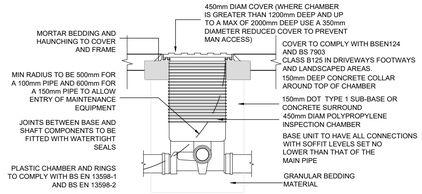
PIPE RUNS NEAR BUILDINGS
(SCALE 1:25)



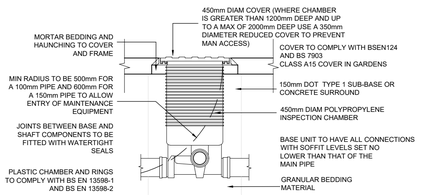
BRANCH INSERTION DETAIL (1:25)

PRIVATE DRAINAGE NOTES

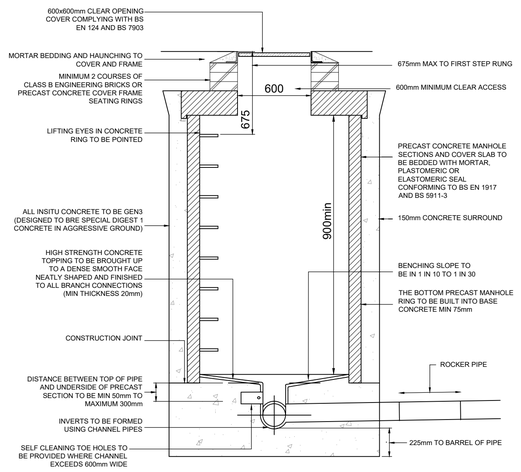
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6. MANHOLES, SEWERS ETC AND ANY OTHER PART OF THE WORKS INTENDED FOR ADOPTION UNDER A SECTION 104 AGREEMENT OR GULLIES ETC INTENDED FOR ADOPTION AS HIGHWAY DRAINAGE ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE W.W.A. SPECIFICATION "SEWERS FOR ADOPTION" 7th EDITION, AND TO THE REGULATORS APPROVAL.
7. UN ADOPTED FW AND SW DRAINAGE IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE BUILDING REGULATIONS, BS 8301 AND RELEVANT AGREEMENT CERTIFICATES.
8. DRAINS ARE TO BE CONSTRUCTED USING FLEXIBLY JOINTED VITRIFIED CLAY PIPES TO BS 65 "SUPER STRENGTH" SPECIFICATION (E.G. HEPWORTH SUPERSLEEVE OR SIMILAR) OR UPVC BUILDING DRAINAGE SYSTEM PIPEWORK TO BS .4660 AND BS. 2494, BEDDED AND BACKFILLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS BACKFILLING OF DRAIN TRENCHES ADJACENT TO DWELLINGS OR OTHER STRUCTURES TO BE IN ACCORDANCE WITH BS. 8301-FIG.9.
9. WHERE CLAY OR CONCRETE RIGID PIPES ARE LAID UNDER DRIVEWAYS THE MIN COVER WITHOUT CONCRETE PROTECTION IS 1200mm. WHERE PLASTIC FLEXIBLE PIPES (NOMINAL RING STIFFNESS SN4) IN CLASS S BEDDING ARE USED THE MIN DEPTH OF COVER BELOW DRIVEWAYS CAN BE REDUCED TO 900mm WITHOUT THE NEED FOR CONCRETE PROTECTION.
10. ALL PIPES TO BE 100mm DIAMETER UNLESS STATED OTHERWISE.
11. ACCESS FITTINGS AND INSPECTION CHAMBERS LESS THAN 1.2m DEEP ARE TO BE CLAYWARE OR PRE-FORMED POLYPROPELENE AS APPROPRIATE TO THE NUMBER OF CONNECTIONS. POLYPROPELENE CHAMBERS CAN BE USED UP 3.0m DEEP BUT REQUIRE MAX 350mm DIAM REDUCED COVER TO PREVENT MAN ENTRY. MANHOLE CHAMBERS ARE TO BE OF PRECAST CONCRETE CONSTRUCTION WITH 150mm INSITU CONCRETE SURROUND. INSPECTION CHAMBER SIZES ARE TO BE IN ACCORDANCE WITH TABLE 8 OF BS. 8301.
12. COVER LEVELS INDICATED ON THE DRAWING ARE NOMINAL AND MAY BE ADJUSTED TO SUIT FINISHED FOUND LEVELS AS NECESSARY.
13. RAINWATER DOWNPIPES TO BE CONNECTED DIRECT TO DRAIN USING AN APPROPRIATE ADAPTOR AND REMOVABLE SECTION OF DOWNPIPE TO PERMIT RODDING ACCESS.
14. WHERE DRAINS PASS THROUGH FOUNDATIONS OR OTHER RIGID STRUCTURES, A LINTEL OR SLEEVE IS TO BE USED AND PROVISION FOR FLEXIBILITY IS TO BE MADE WITH "ROCKER PIPES".
15. ANY EXISTING LAND DRAINS SEVERED BY SITE OPERATIONS SHOULD BE DIVERTED AROUND ANY PROPERTIES AND RECONNECTED TO THE EXISTING LAND DRAINAGE SYSTEM VIA A SILT TRAP.
16. THE POSITIONS OF SVP'S, STUB-STACKS, W.C. OUTLETS ETC AND RAINWATER DOWNPIPES ARE TO BE ACCURATELY LOCATED FROM THE ARCHITECTS WORKING DRAWINGS.
17. GULLIES SITUATED IN AREAS ACCESSIBLE TO WHEELED VEHICLES TO BE OF A SUITABLE CONSTRUCTION (E.G. HEPWORTH CODE 194 GULLY POT WITH INSITU CONCRETE BED AND SURROUND, FITTED WITH DRAINAGE CASTINGS CODE TD651 GRATING AND FRAME), UNLESS INDICATED AS HIGHWAY GULLIES.
18. DRAINS WITHIN AREAS OF "MADE GROUND" TO BE CONSTRUCTED BY FIRST MAKING UP THE AREA TO APPROXIMATE FINISHED LEVEL AND THEN EXCAVATING THROUGH THE FILL MATERIAL INTO UNDISTURBED GROUND. THE DRAIN TRENCH IS THEN TO BE BACKFILLED TO FORMATION LEVEL USING SUITABLE GRANULAR FILL MATERIAL WELL COMPACTED IN LAYERS NOT EXCEEDING 225mm.
19. PRIVATE DRAINAGE CONNECTIONS TO ADOPTABLE SEWERS TO BE VIA 45° JUNCTIONS AND NOT SADDLES.

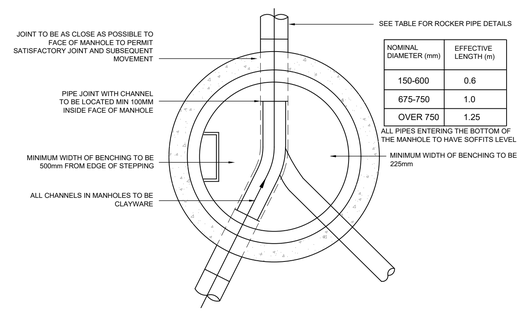


POLYPROPYLENE INSPECTION CHAMBER (1:25)
(WHERE SITED IN DRIVEWAYS/PAVED AREAS) - MAX 2000 DEPTH (adopted)
UP TO 3000 DEEP FOR PRIVATE IC`s



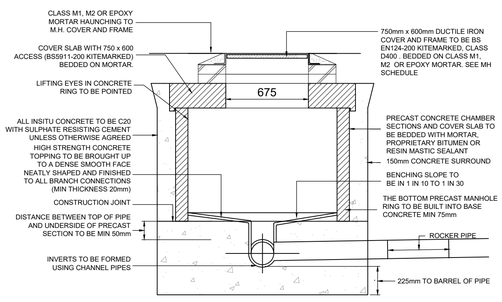
POLYPROPYLENE INSPECTION CHAMBER (1:25)
(WHERE SITED IN GARDENS) - MAX 2000 DEPTH (adopted)
UP TO 3000 DEEP FOR PRIVATE IC`s



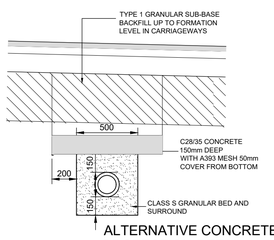


NOMINAL DIAMETER (mm)	EFFECTIVE LENGTH (m)
150-600	0.6
675-750	1.0
OVER 750	1.25

TYPICAL MANHOLE DETAIL TYPE B
MAXIMUM DEPTH FROM COVER LEVEL
TO SOFFIT OF PIPE 3000 (1:25)



TYPICAL MANHOLE DETAIL TYPE C
1000-1500 DEEP (1:25)



ALTERNATIVE CONCRETE
PROTECTION DETAIL (1:25)

CONCRETE PROTECTION	
CLASS 1 SULPHATE CONDITIONS	
ADOPTABLE STANDARDS AND AREAS SUBJECT TO HEAVY LOADING	GEN3 OR ST4
AREAS SUBJECT TO LIGHT LOADING eg. PRIVATE DRIVES, SMALL CAR PARKS	GEN1 OR ST2
FOR BURIED CONCRETE EXPOSED TO SULPHATE CONDITIONS	
CLASS 2	FND 2
CLASS 3	FND 3
CLASS 4A	FND 4A
CLASS 4B	FND 4B

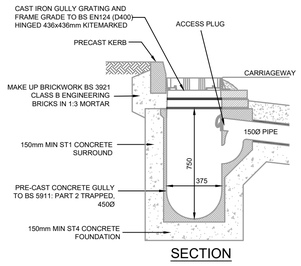
SIZE OF BEDDING MATERIAL
ALL GRANULAR MATERIAL TO BE SINGLE SIZED OR GRADED IN ACCORDANCE WITH BS 882:BS1047.BS3797

PIPE DIAMETER	NOMINAL SINGLE SIZED	GRADED
UP TO 100mm	10mm	
OVER 100mm TO 150mm	10mm or 14mm	5mm to 14mm
OVER 150mm TO 300mm	10mm,14mm or 20mm	5mm to 14mm or 5mm to 20mm
OVER 300mm TO 550mm	14mm or 20mm	5mm to 14mm or 5mm to 20mm
OVER 550mm	14mm, 20mm or 40mm	5mm to 14mm or 5mm to 20mm or 5mm to 40mm

LIMITS OF COVER IN ANY WIDTH OF TRENCH

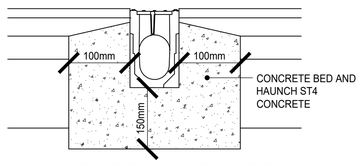
NOMINAL SIZE	LAID IN FIELDS	LAID IN LIGHT ROADS	LAID IN MAIN ROADS
CLASS 120 CLAYWARE PIPES (CLASS B BEDDING)			
100-150mm	0.6m - 8.0m	1.2m - 8.0m	1.2m - 8.0m
225mm	0.6m - 5.0m	1.2m - 5.0m	1.2m - 4.5m
400mm	0.6m - 4.5m	1.2m - 4.5m	1.2m - 4.0m
600mm	0.6m - 4.5m	1.2m - 4.5m	1.2m - 4.0m
CLASS M CONCRETE PIPES (CLASS B BEDDING)			
300mm	0.6m - 3.0m	1.2m - 3.0m	1.2m - 2.5m
450mm	0.6m - 3.5m	1.2m - 3.5m	1.2m - 2.5m
600mm	0.6m - 3.5m	1.2m - 3.5m	1.2m - 3.0m
THERMOPLASTIC PIPES (CLASS S BEDDING)			
100 - 300mm	0.6m - 7.0m	0.9m - 7.0m	0.9m - 7.0m

WHERE COVER IS LESS THAN THE ALLOWABLE DEPTH PIPES TO HAVE A CLASS Z CONCRETE SURROUND OR CONCRETE COVER SLAB PROTECTION



SECTION

TYPICAL PRECAST
CONCRETE ROAD GULLY
DETAIL (1:25)



ACO ROAD DRAIN TYPICAL DETAIL
(SCALE 1:10)

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PROJECT
St Marys Street, Penistone

DRAWING TITLE
Drainage Details
Sheet 1 of 2

Drawn	Chkd	Date	Scale
JS	AD	January 2026	As Shown

Sheet Size	Drawing No.	Revision
A1	25791-DR-C-0102	P1