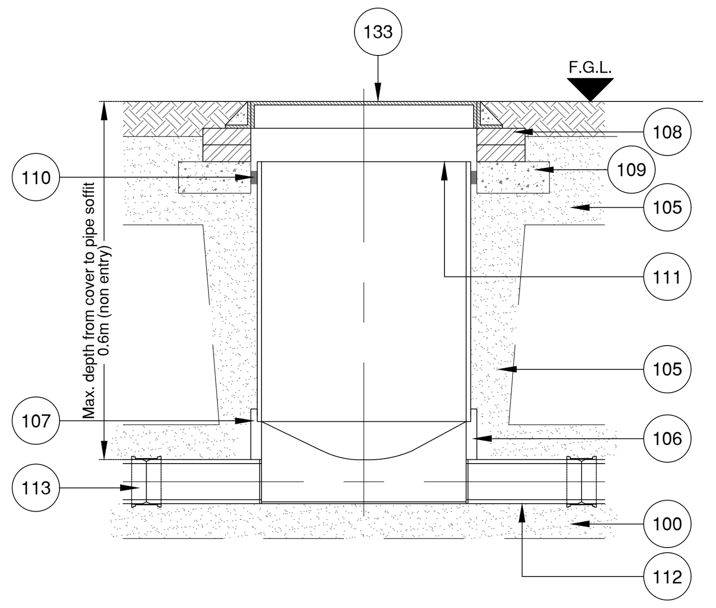
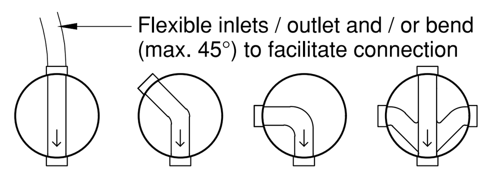


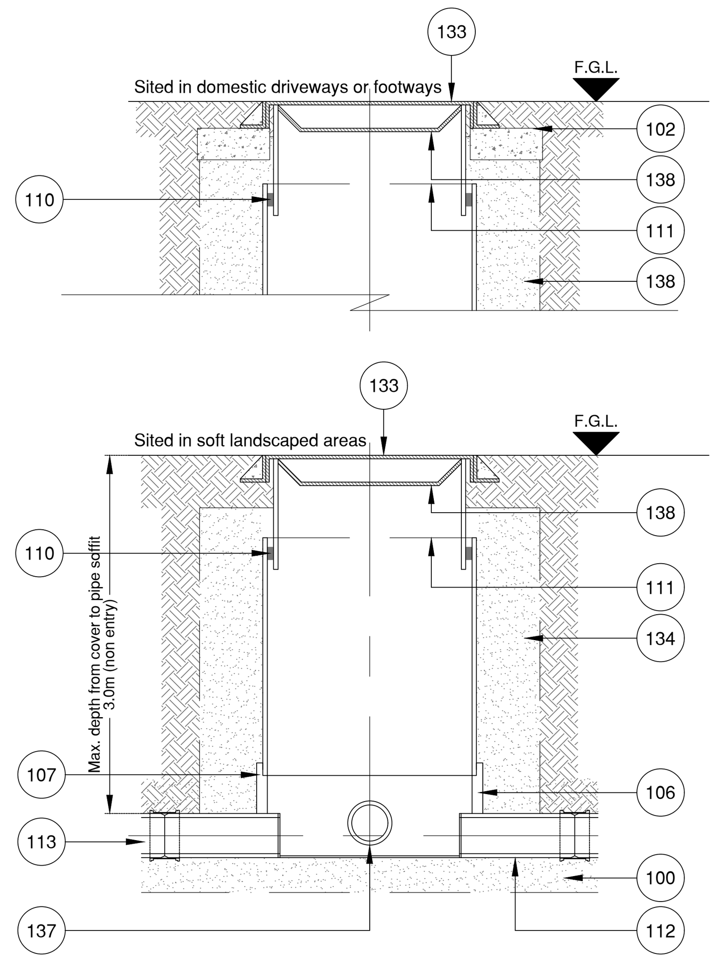
Typical access chamber detail - Type 3

(Flexible material detail)

Minimum internal dimensions 450mm dia. or 450mm x 450mm



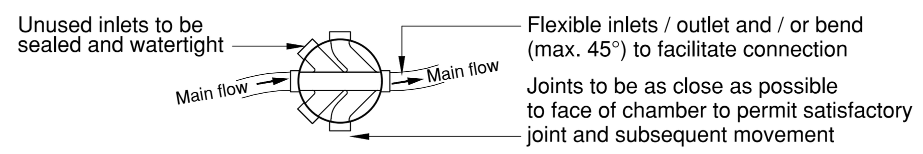
Plastic chambers and rings shall comply with BS EN 1395-1 and BS EN 13592-2 or have equivalent independent approval



Typical access chamber detail - Type 4

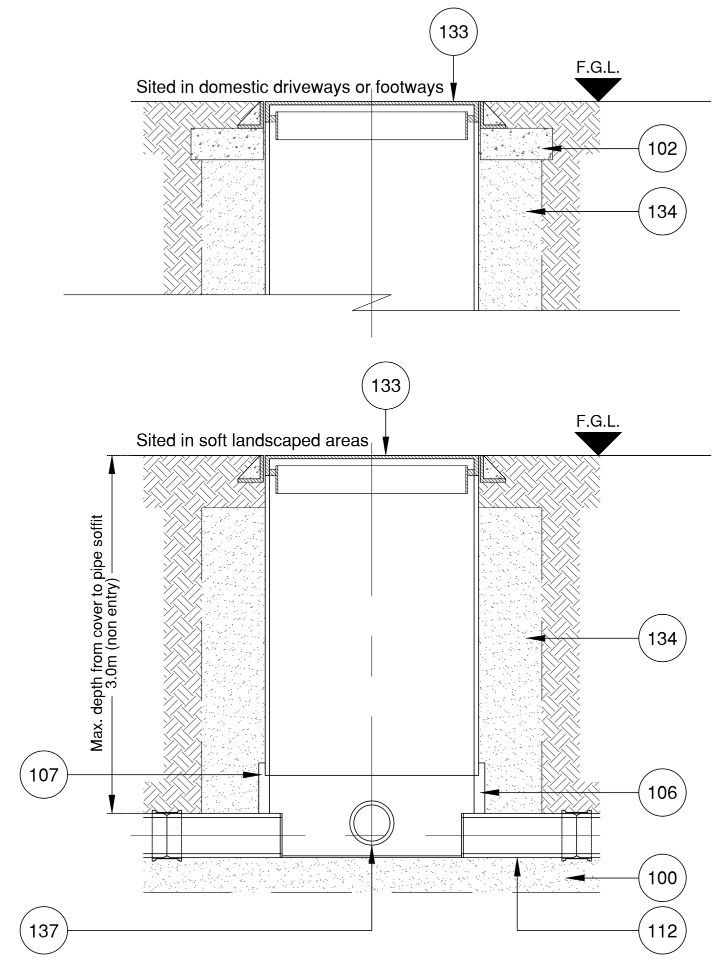
(Flexible material detail)

Minimum internal dimensions 450mm dia. or 450mm x 450mm



Where chambers are positioned on 90° corners always use the main channel by fitting a 45° bend on the inlet and outlet

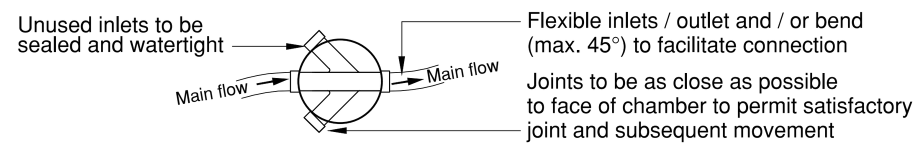
Plastic chambers and rings shall comply with BS EN 1395-1 and BS EN 13592-2 or have equivalent independent approval



Typical access chamber detail - Type 5 or 6

(Flexible material detail)

Type 5 - Minimum internal dimensions 450mm dia. or 450mm x 450mm
Type 6 - Minimum internal dimensions 190mm dia. or 225mm x 100mm



Where chambers are positioned on 90° corners always use the main channel by fitting a 45° bend on the inlet and outlet

Plastic chambers and rings shall comply with BS EN 1395-1 and BS EN 13592-2 or have equivalent independent approval

100	Granular bedding material	121	100mm bed of selected as dug or granular material; if ground conditions unstable (Site Control to confirm) use 100mm bed of GEN 4 Designated Mix insitu concrete.
101	Compacted backfill - As-dug or granular bedding material	122	Short radius 90 degree bend.
102	150mm deep concrete collar	123	Square hopper with back inlet and alloy grid or sealing plate.
103	Cover to suit BS EN 124 loading Gardens - Grade A15; Driveway and footways - Grade B125; Maximum cover opening to be 350mm	124	Cement mortar joint/infill.
104	350mm minimum radius	125	Minimum 150mm thick GEN 4 concrete surround.
105	DOT Type 1 sub base (thickness varies)	126	Rubber plug.
106	Base unit to have connection with soffit levels set no lower than that of the main pipe	127	Catchment bucket.
107	Joints between base and shaft and between shaft components to be fitted with watertight seals	128	Round or square road gully with grating and frame to BS EN 124, Grade B as detailed on drainage layout and schedules, set in 1:3 cement and sand mortar centrally over gully chamber.
108	Class B engineering brickwork, concrete blocks 4 courses maximum or 2 courses minimum. or precast concrete cover frame seating rings	129	Round or square gully grid; black cast iron to drives with a bitumous surface and alloy finish elsewhere.
109	Precast concrete slab or in-situ concrete slab to support cover and frame	130	Minimum 100mm thick GEN4 concrete surround.
110	Flexible seal	131	150mm Precast base or In situ formed
111	Temporarily cap manhole shaft during construction	132	Precast concrete manhole section to be bedded with mortar, proprietary sealant or elastomeric seals
112	Rocker pipe	133	Manhole cover to suit BS EN 124 loading Grade 125
113	Joint be to as close as possible to face of chamber to permit satisfactory joint and subsequent movement	134	Compacted backfill - as-dug or granular bedding material
114	Grade C light duty oval cover, sealing ring and rodding eye in 100mm insitu concrete surround set level with finished ground level.	135	Precast concrete cover frame seating rings 350mm dia or 300mm x 300mm opening
115	Pipe cut to required length.	136	Pipes built into chamber wall or joint formed with watertight seals
116	Concrete bed and surround will be required where inspection chambers are installed in soft landscaped areas subjected to heavy construction traffic.	137	Invert of connecting pipe at least 50mm above that of the main pipe
117	45 degree bend.	138	Access opening restricted to 350mm dia. or 300mm x 300mm
118	Oblique 45 degree junction.	139	Joints to be made with either butyl resin sealant or cement mortar
119	PVCu rainwater down pipe. (CSS)	140	Precast concrete chamber sections
120	Rest bend, for use up to two storey only.	141	High-strengh concrete topping minimum 20mm thick Benching slope to be 1:10 to 1:30
		142	Inverts to be formed using channel pieces

143	In-situ concrete to be GEN 3 (designed to BRE special Digest 1 Concrete in Aggressive Ground)
144	Arch over pipe
145	Class B engineering bricks or concrete blocks not less than 200mm thick

NOTES

1. This drawing is to be read in conjunction with Foul Water Sewer Longitudinal Sections (FON-160-01 to 04), Surface Water Sewer Longitudinal Sections (FON-161-01 to 03), Highways Construction Details (FON-180-01 to 02), Highways Contours Layouts (FON/121-01 to 18), Highways Setting out Layout (FON-113-01 to 02), Highways Setting Out Coordinate Listings (FON-113-03), Drainage Construction Details (FON-181-01 to 02), Foul Water Manhole Schedules (FON-141-01 to 03), Surface Water Manhole Schedules (FON-140-01 to 02), Domestic Drainage Layouts (FON-130-01 to 18), Domestic Drainage Construction Details (FON-182-01 to 02), Surface Water Attenuation Details (FON-183-01 to 02) and Building Setting Out Layouts (FON-110-01 to 18).
2. All dimensions are in millimetres unless stated otherwise.
3. Do not scale from this drawing. Only written dimensions are to be used.
8. **All construction to be in accordance with Sewers for Adoption - 6th Edition & Interim Addendum and ICOSA Water specific requirements.** and Part H of the Building Regulations
9. Refer to geotechnical report for sulphate resisting class and ACEC class.
10. Insitu concrete generally to be GEN 4 Designated Mix.
11. Insitu reinforced concrete to be RC 35 Designated Mix only when specified.
12. Where sulphates present, Consulting Engineer to confirm concrete and mortar specification.
13. All insitu concrete to be thoroughly compacted.
14. Typical domestic inspection chamber and manhole details shown on this drawing, widths and lengths will vary as follows:-
15. All covers to be stamped "FW" or "SW". as appropriate.
16. For Manufacturer and specification of pipes and fittings refer to drainage layout and schedule.
17. Drainage pipes and fittings to be Hepworth vitrified clay and PVCu or Wavin Osma PVCu or other equavalent approved. Refer to drainage layout and schedules for details of manufacturer and specification.
18. Mild steel fabrication to be hot dip galvanised to BS EN 1461.
19. ***Outgoing pipes greater than 600mm dia. should be fitted with guard bars, safety chains [to BS4942 pt 2 and BS 729] or other safety devices in accordance with the Southern Water safety policy.***

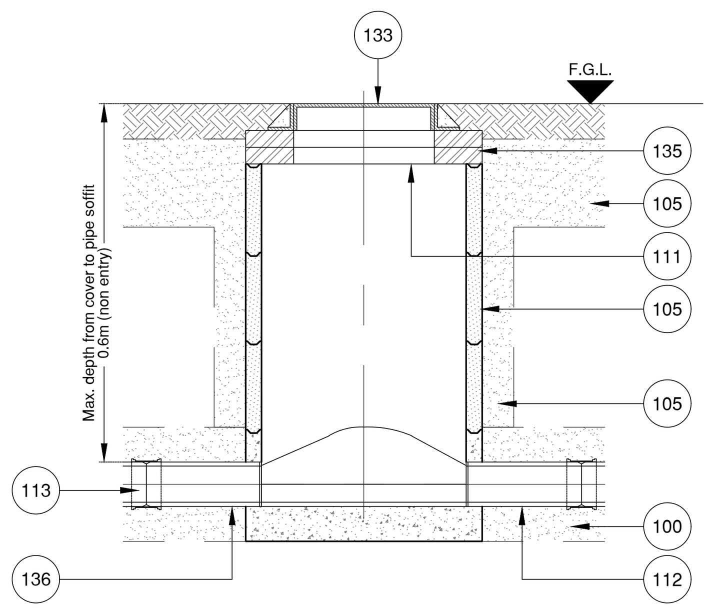
DEPTH OF PIPE COVER

The minimum depth of pipe cover to the crown of gravity pipes without protection should be as follows:

- domestic gardens and pathways without any possibility of vehicular access, 0.35m;
- domestic driveways, parking areas and yards with height restrictions to prevent entry by vehicles with a gross weight in access 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;
- agricultural land and public open space, 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.

CDM NOTES

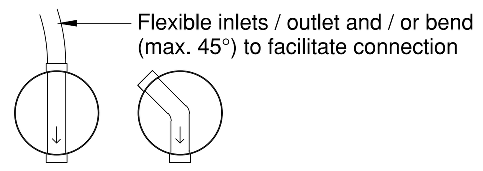
1. EXISTING SERVICES. Depth of existing services must be determined prior to works commencing. The contractor is responsible for establishing underground services in accordance with HSE Guidance note HS (G) 47. Any services which would be within the proposed construction layers must be lowered to below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

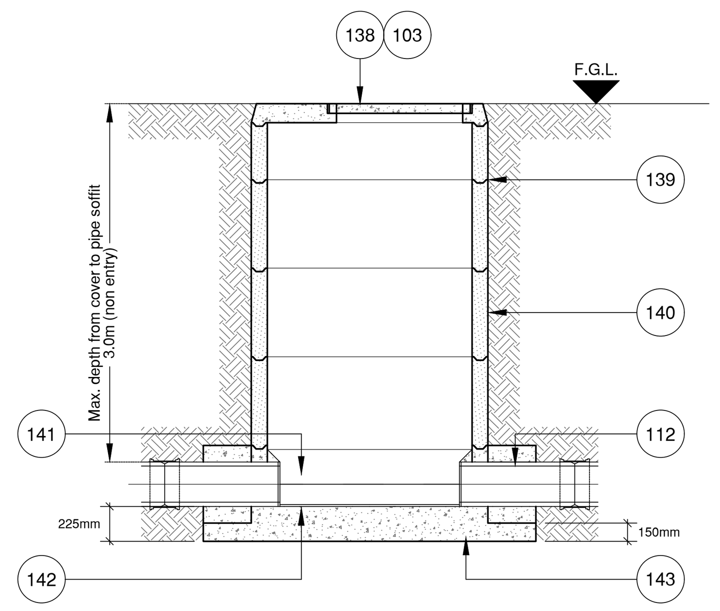


Typical access chamber detail - Type 3

(rigid material detail)

Minimum internal dimensions 450mm dia. or 450mm x 450mm

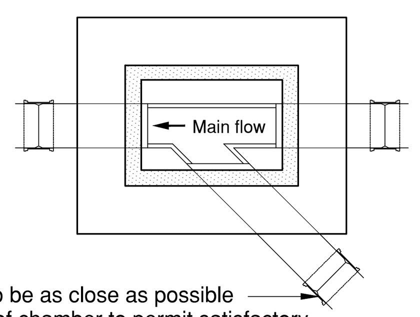




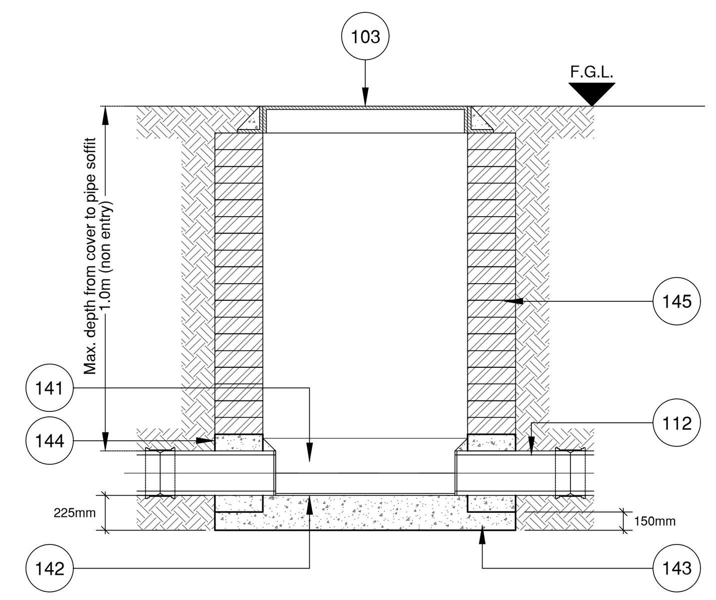
Typical access chamber detail - Type 4

(rigid material detail)

Minimum internal dimensions 450mm dia. or 450mm x 450mm



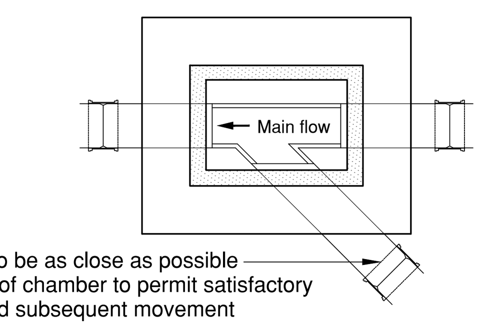
Joints to be as close as possible to face of chamber to permit satisfactory joint and subsequent movement



Typical access chamber detail - Type 5 or 6

(rigid material detail)

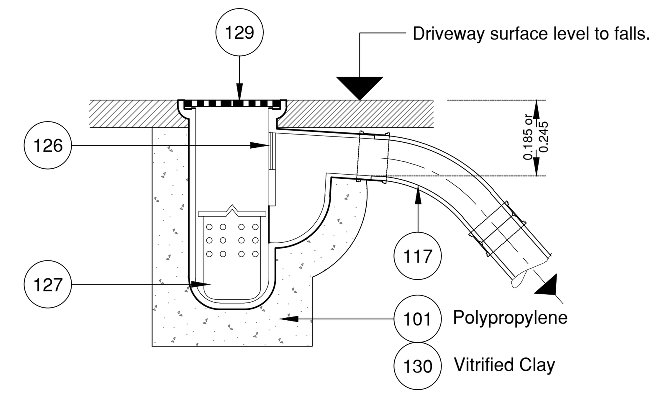
Type 5 - Minimum internal dimensions 450mm dia. or 450mm x 450mm
Type 6 - Minimum internal dimensions 190mm dia. or 225mm x 100mm



Joints to be as close as possible to face of chamber to permit satisfactory joint and subsequent movement

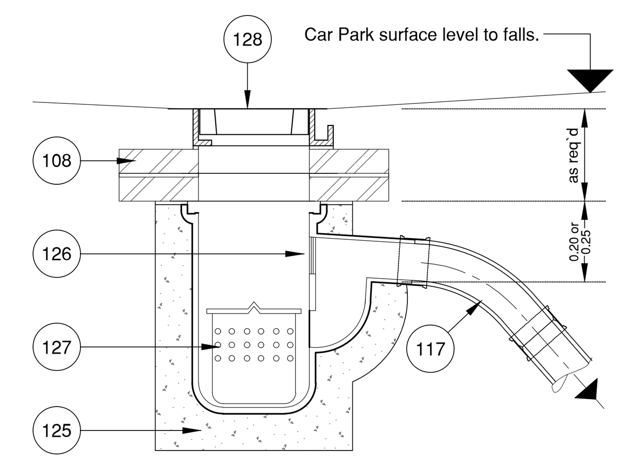
Where chambers are positioned on 90° corners always use the main channel by fitting a 45° bend on the inlet and outlet

Note: The use of precast rectangular concrete manhole units with 150mm grade GEN3 concrete surround (designed to BRE special Digest 1 Concrete in Aggressive Ground)



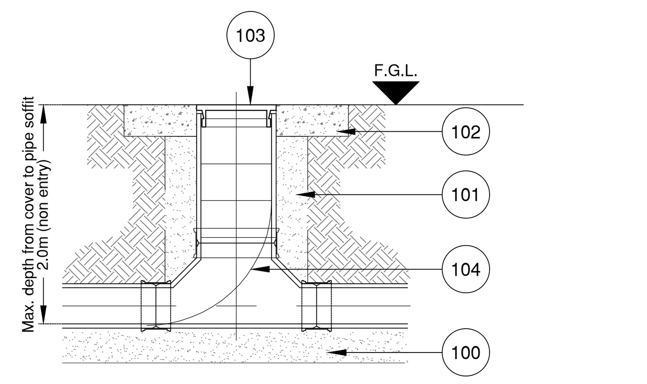
Private Drive Gully

Round or square polypropylene or vitrified clay gully.
300mm diameter x 600mm invert depth.
100 or 150mm dia. connection.



Private Car Park Gully

Round or square polypropylene or vitrified clay gully.
300mm diameter x 600mm invert depth.
100 or 150mm dia. connection.

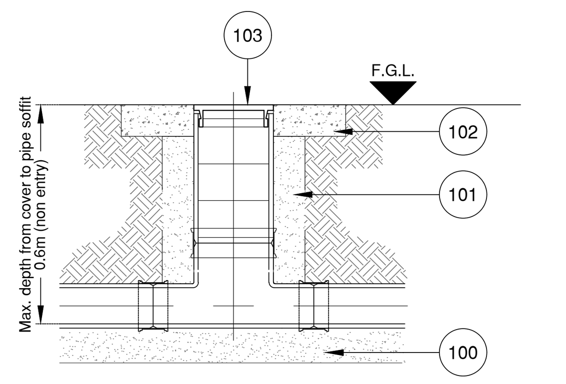


Typical access chamber detail - Type 7

Minimum internal diameter 190mm or 225mm x 100mm

Note: NO CONNECTION ALLOWED

Plastic chambers and rings shall comply with BS EN 1395-1 and BS EN 13592-2 or have equivalent independent approval

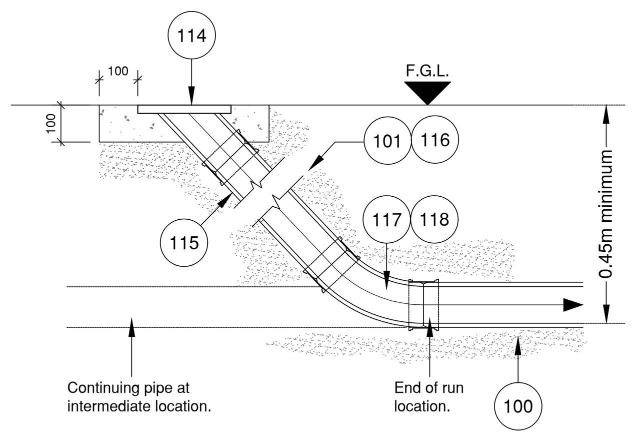


Typical access chamber detail - Type 8

Minimum internal diameter 190mm or 225mm x 100mm

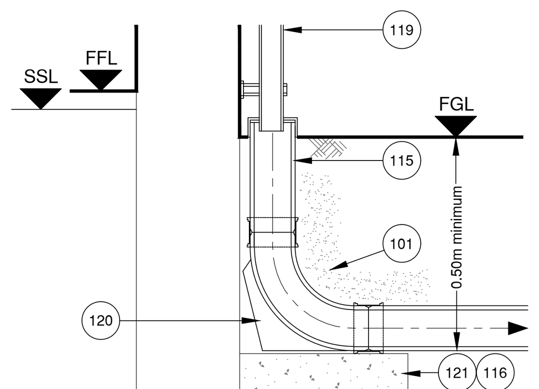
Note: NO CONNECTION ALLOWED

Plastic chambers and rings shall comply with BS EN 1395-1 and BS EN 13592-2 or have equivalent independent approval

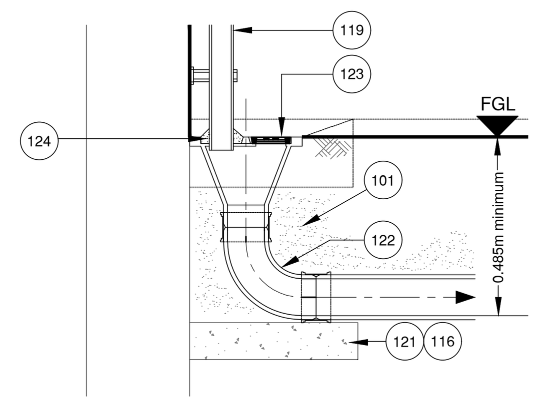


Rodding Point

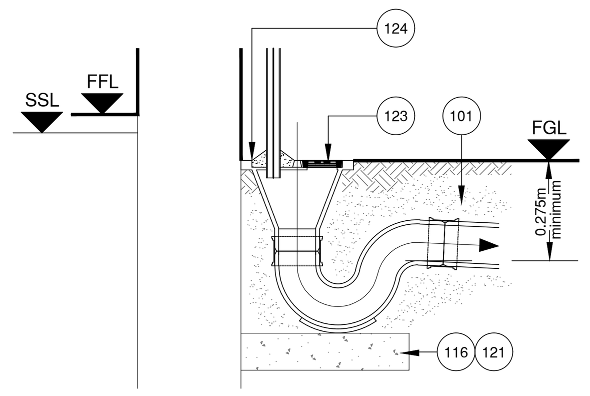
100 or 150mm dia. connections.



Direct Rainwater Connection



Direct Rainwater Connection through Gully



External sink waste into trapped Back inlet gully

Rev.	Date	Details	By	Chkd	Appd
A	26.05.20	Drawing number update to Dandara numbering system	TRS	TRS	

Client:- dandara

Site:- Fontwell Eastergate Arundel

Drawing Title:- DOMESTIC DRAINAGE CONSTRUCTION DETAILS

SHEET 1 OF 2

Date: March 2020 | Scales: Not to scale at A1

Drawn: GD-I | Checked: LD | Approved: TRS

Drawing No. FON-182-01-A

INITIAL TENDER ISSUE

SUBJECT TO PLANNING APPROVAL

RCP ARCHITECTURE & CIVIL ENGINEERING
Rogers Cory Partnership
Architectural and Civil Consultants
The Old School Old School Road
Hook Hampshire RG27 9NJ
T: 01256 769269 E: mail@rcpconsultants.co.uk W: rcpconsultants.co.uk

ARUN DISTRICT COUNCIL WA/99/20/DOC