

Maximum depth from cover level to soffit of pipe for areas subject to vehicle loading 3m, non entry.
Based on Sewers for Adoption 7th Edition
Scale: 1:20

Access opening restricted to 350mm diameter or 300mm x 300mm if depth to invert is > 1m

Manholes cover to suit BS EN 124 loading Highways - Class D400 600mm clear opening

Class B engineering brickwork, concrete blocks or precast concrete cover frame seating ring

Precast concrete slab or in-situ concrete slab to support cover and frame

Flexible Seal

DOT Type 1 sub base (thickness varies)

Temporarily cap manhole shaft during construction

Minimal Internal dimensions 450mm diameter or 450mm x 450mm

Excavation width varies with depth

Joints between base and shaft and between shaft components to be fitted with watertight seals

Base unit to have all connection with soffit levels no lower than that of the main pipe

150mm granular pipe bedding material

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

Invert of connecting pipe at least 50mm above that of the main pipe.

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See Clause E2.32, Sewers for Adoption 7th Edition

Mortar bedding and haunching to cover and frame to Clause E6.7

150mm deep concrete collar

Flexible Seal

Temporarily cap manhole shaft during construction

Joints between base and shaft and between shaft components to be fitted with watertight seals

Access opening restricted to 350mm diameter or 300mm x 300mm if depth of chamber to invert is >1m

DOT Type 1 sub base (thickness varies) or concrete surround

Minimal Internal dimensions 450mm diameter or 450mm x 450mm

Excavation width varies with depth

Base unit to have all connection with soffit levels no lower than that of the main pipe

150mm granular pipe bedding material

Invert of connecting pipe at least 50mm above that of the main pipe.

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

See clause E2.3.2, Sewers for Adoption 7th Edition

Mortar bedding and haunching to cover and frame to Clause E6.7

Topsoil

Flexible Seal

Temporarily cap manhole shaft during construction

Joints between base and shaft and between shaft components to be fitted with watertight seals

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

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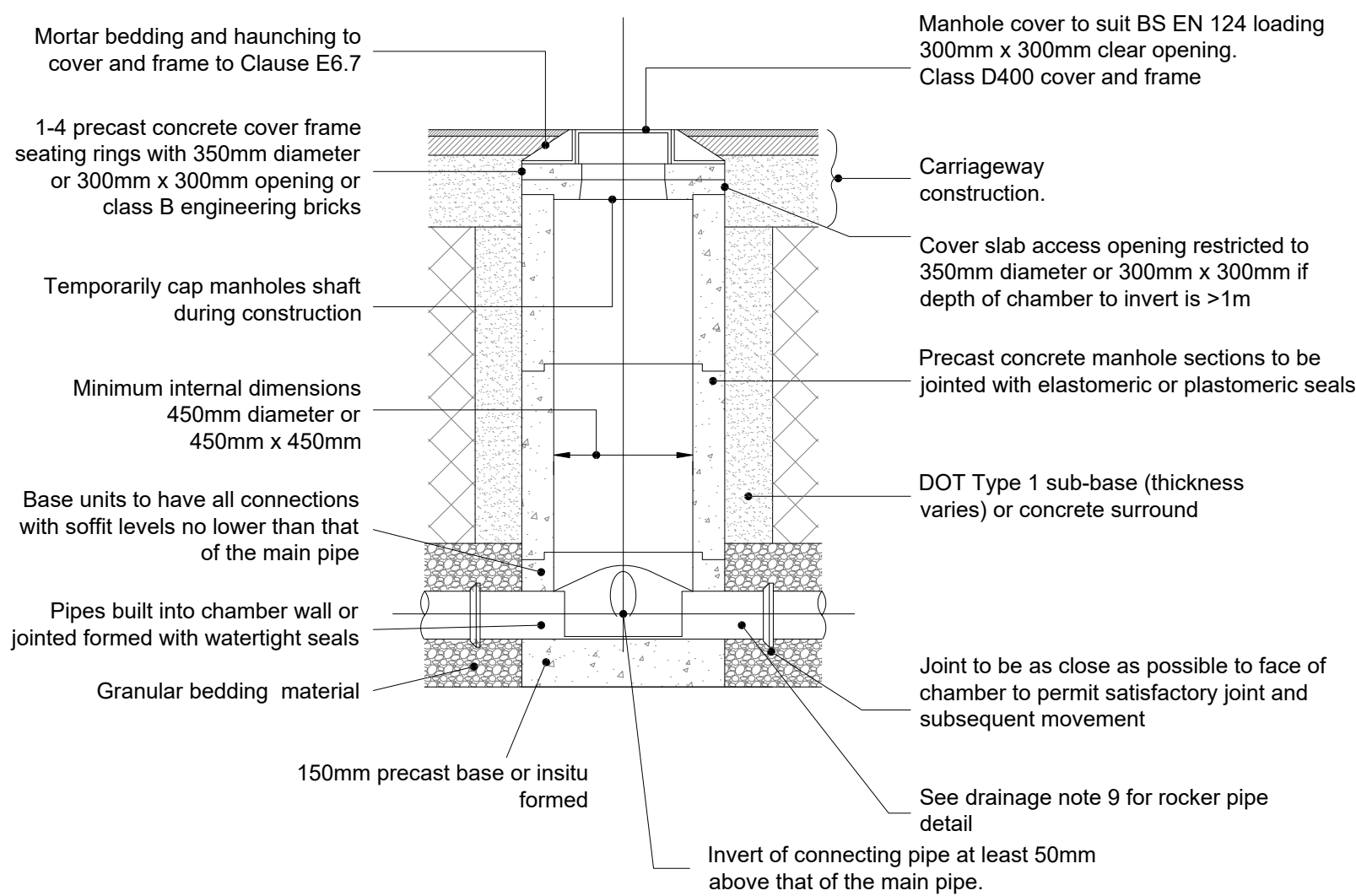


Figure B.18
Typical Inspection Chamber Detail - Type 3
Maximum depth from cover level to soffit of pipe for areas subject to vehicle loading 3in., non entry
Based on: Sewers for Adoption 7th Edition
Scale 1:20

Based on Sewers for Adoption 7th Edition
Scale: NTS

Diagram illustrating the chamber configuration and flow directions:

- Main flow**: Indicated by arrows pointing into and out of the chamber.
- Joint to be close as possible to face of chamber to permit satisfactory joint and subsequent movement**: Points to the connection between the chamber and the inlet/outlet pipes.
- Unused inlets to be sealed and watertight**: Points to the unused inlet ports.
- Flexible inlet / outlet and / or bend (maximum angle 45°)**: Points to the flexible connection between the chamber and the inlet/outlet pipes.
- Main flow**: Indicated by an arrow pointing out of the chamber.

The diagram illustrates the vertical and horizontal dimensions of a trench construction. The vertical layers from top to bottom are: Road / Pavement construction, Backfill material placed and compacted over the full width of the trench in layers not exceeding 150mm before compaction, Backfill material and granular surround placed and compacted over the full width of the trench in layers not exceeding 150mm before compaction, and Granular bedding placed and compacted over full width of trench to form a firm, even bedding surface (refer to table for granular material size). The horizontal dimensions are: Trench width (OD + 600 Maximum, OD + 300 Minimum) and a 300 mm dimension for the granular bedding layer.

Vertical dimensions (from top to bottom):

- Varies
- Varies
- Y
- OD
- Y

Horizontal dimensions (from left to right):

- Varies
- 300 mm
- Varies

Labels and descriptions:

- Road / Pavement construction
- Backfill material placed and compacted over the full width of the trench in layers not exceeding 150mm before compaction
- Backfill material and granular surround placed and compacted over the full width of the trench in layers not exceeding 150mm before compaction. Compaction shall be undertaken by hand or by light mechanical plant
- Granular bedding placed and compacted over full width of trench to form a firm, even bedding surface (refer to table for granular material size).
- Trench width
OD + 600 Maximum
OD + 300 Minimum

Scale: NTS
Y = $\frac{1}{9}$ OD (min. 100)

Maximum depth from cover level to soffit of pipe 2m, non entry.
Based on Sewers for Adoption 7th Edition
Scale: 1:20

The diagram illustrates a chamber with multiple inlets and outlets. A central circular chamber is shown with several flexible inlet/outlet pipes connected to it. The main flow is indicated by arrows pointing into the chamber from the top left and bottom right. A label points to the joint between the chamber and the pipes, stating: "Joint to be close as possible to face of chamber to permit satisfactory joint and subsequent movement". Another label points to the unused inlets, stating: "Unused inlets to be sealed and watertight". A third label points to a flexible inlet/outlet pipe, stating: "Flexible inlet / outlet and / or bend (maximum angle 45°)".

Diagram illustrating the trench construction details:

- Top Layer:** Road / Pavement construction (indicated by a hatched pattern).
- Surround Layer:** GEN3 concrete surround with 18mm compressible board at all pipe joints (indicated by a diagonal hatched pattern).
- Backfill Layer:** Backfill material placed and compacted over the full width of the trench in layers not exceeding 150 before compaction (indicated by a dotted pattern).
- Bottom Layer:** Backfill material and granular surround placed and compacted over the full width of the trench in layers not exceeding 150mm before compaction. Compaction shall be undertaken by hand or by light mechanical plant (indicated by a dotted pattern).
- Dimensions:**
 - Trench width:** OD + 600 Maximum, OD + 300 Minimum.
 - Trench depth:** 300 min.
 - Overall dimensions:** A (width), B (depth).

Scale: NTS
A = The larger of $1\frac{1}{2}$ OD or OD+300mm

Scale	As shown @ A1	Drawn	MD
Date	March 2022	Checked	TL
File	Drawing No	Rev	
PR21-023-Civils-dwgs-450	21-023-450	-	