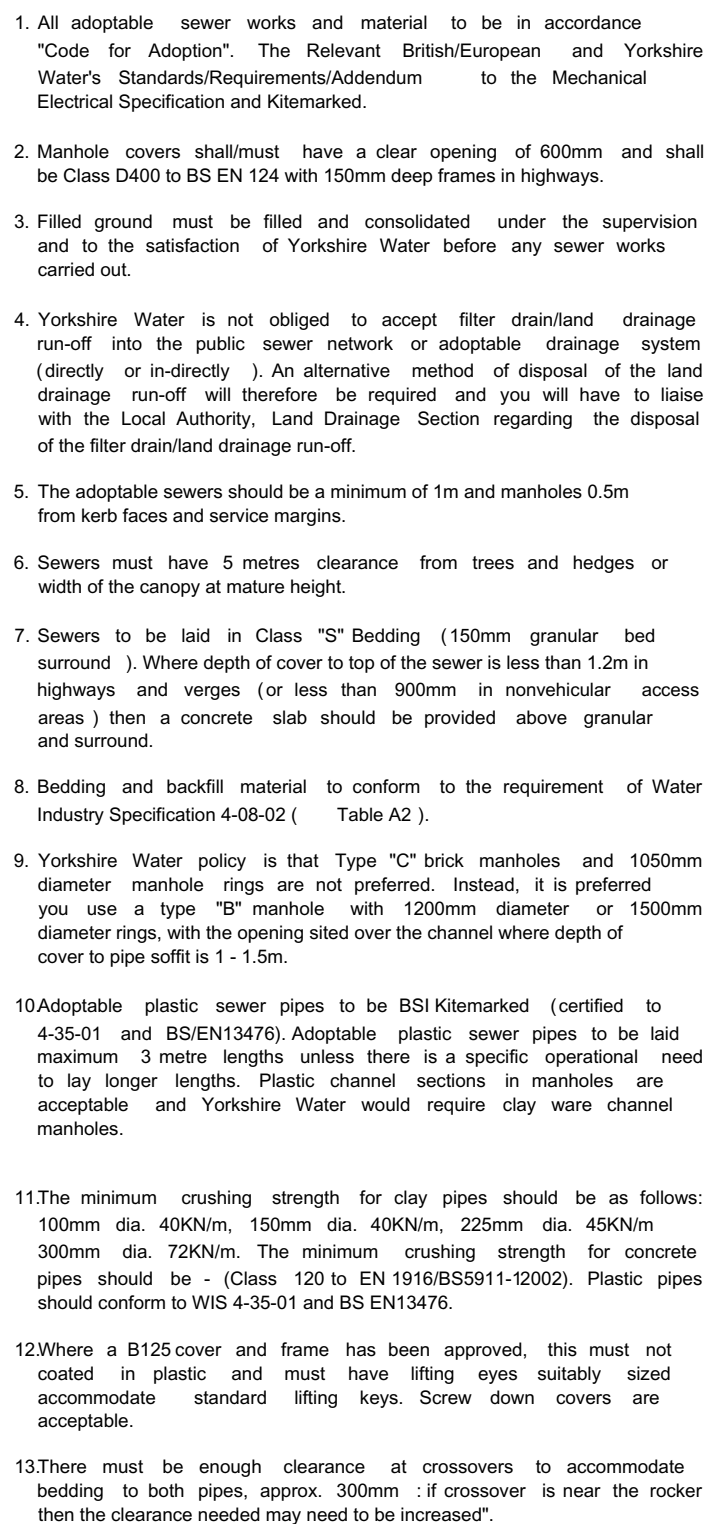
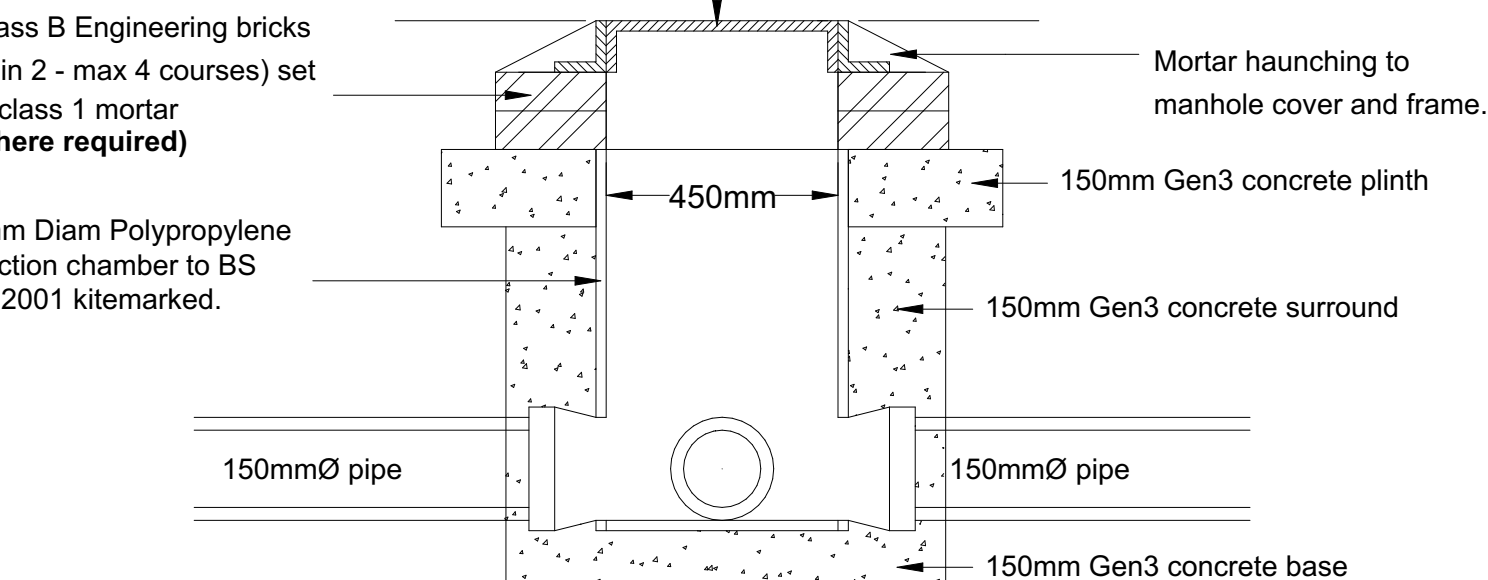


on manholes with maximum depth from cover level
to soffit of pipe 3000mm



Surface	Class (Loading in kN)	Loading
Road	D400	Vehicle Impact
Footway & Driveway	B125	Occasional vehicle loading
Gardens	B125	Pedestrian/cyclist

For depth of chamber from cover level to invert level of pipe chamber less than 1200mm



For depth of chamber from cover level to invert level of pipe chamber less than 1200mm

Class B Engineering bricks
(min 2 - max 4 courses) set
in class 1 mortar
(where required)

Location	Minimum Depth (m)
Gardens	0.9
Agricultural/Open spaces	0.9
Driveways (trafficked areas)	1.2 (see detail)

Diagram illustrating the trench fill under roads to conform with Highways requirements. The diagram shows a cross-section of a trench with a pipe. The trench is filled with single-size granular material. The dimensions are specified as 150 mm min for the pipe diameter and 150 mm min for the surrounding material thickness.

Single-size granular material.
10mm for 100mmØ pipes.
10 or 14mm for 150mmØ pipes.

Tumbling bay junction (actual details will be dependent on the type of pipe used)

In-situ concrete to be GEN3 (designed to BRE Special Digest 1: 'Concrete in Aggressive Ground')

2 No 45° bends 225mm min diameter. Where pipe exceeds 300mm, a 90° bend may be used

Concrete surround to backdrop to continue to the base of the manhole

150mm minimum

225mm minimum

900mm min.

Inside face of manhole

Straight outlet pipe for 150mm and 225mm diameters only. For larger diameters, bends are to be built through the manhole wall

Backdrop to soffit level

Preferred Backdrop Construction

Diagram of a manhole with a backdrop. A note indicates: "Backdrop to be within the 150mm concrete surround to the manhole".

Type A1 (Design and Construction Guidance)

Top Section View Labels:

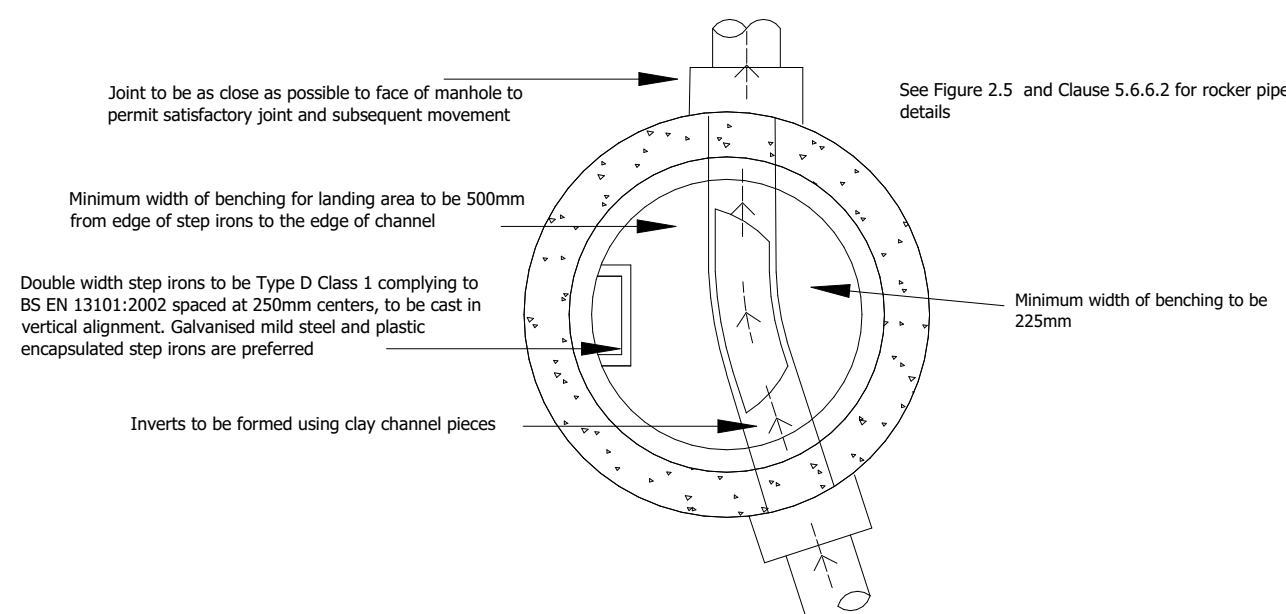
- 60mm Ductile iron cover & frame to BS. EN 124 & BS 7903 having 600 x 600 opening with 150mm deep frame in the highway (see clause 5.2.32)
- Mortar haunching to M.H. cover and frame Refer to Clause 5.6.7. Where manholes are located in highway mortar haunch is to step 100mm below cover level
- Minimum clear opening 600mm
- On manholes less than 1.5 m diameter reducing slab not to be used and PC rings to continue up to cover slab
- Double width step irons to be Type D Class 1 complying to BS EN 13101-2002 spaced at 250mm centers, to be cast in vertical alignment. Galvanised mild steel and plastic encapsulated step irons are preferred
- Lifting eyes in concrete rings to be pointed
- High strength concrete topping to be brought up to a dense smooth face neatly shaped and finished to all branch connections (min. thickness 20mm). Gradient to be 1:10 - 1:30
- The bottom precast section is to be built into base concrete min. 75mm
- Box cut to be provided in bending of sewer greater than 600mm dia. for access to invert (750mm box cut with between min 750mm and max 3750mm length/benching).
- Inverts to be formed using clay channel pieces
- GEN 3 concrete base.
- 675mm maximum to first Step iron from cover level
- 2 minimum - 4 courses maximum of Class B engineering bricks, concrete blocks or precast concrete cover frame seating rings
- Kitemarked Precast cover slab
- Shaft diameter 1200 mm min
- Kitemarked Precast reducing slab with 900mm opening
- Precast concrete manhole sections and cover slab to be bedded with mortar, plasticomeric or elastomeric seal conforming to BS EN 1917 and BS5911-3 Chamber wall to be minimum 125mm
- Concrete surround 150 mm thick (GEN3 Concrete) In-situ concrete to be GEN3 (designed to BRE Special Digest 1 Concrete in Aggressive Ground)
- 2500 mm

Bottom Section View Labels:

- The bottom precast section to be built into base concrete minimum 75 mm
- Construction joint
- Distance between top of pipe and underside of precast section to be min 50 mm to max 300 mm
- 225mm to barrel of pipe

Section View

Type A and Type B (Design and Construction Guidance)



P01	FOR APPROVAL	09/03/2028		MBM
RevID	Layout Comment	Issue Date	Issuer-Info	Approved by

	Issuing Office Kent	Project No. 0226CD7687
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Client Approval	
☐	A - Approved
☐	B - Approved with Comments
☐	C - Do Not Use
Status	Purpose of Issue
S3	FOR APPROVAL

Originator

Adkins Consultants Ltd
130 Ashford Rd, Bearsted, Maidstone ME14 4AF

Project **31-33 PERRYMOUNT ROAD**
HAYWARD HEATH

Layout Title
DRAINAGE CONSTRUCTION DETAILS
2

Client **WE-BUILD UK**

Drawing Number							
project	originator	volume	level	type	role	number	rev
7687 - AA - XX - XX- DC - E - 0301							P01