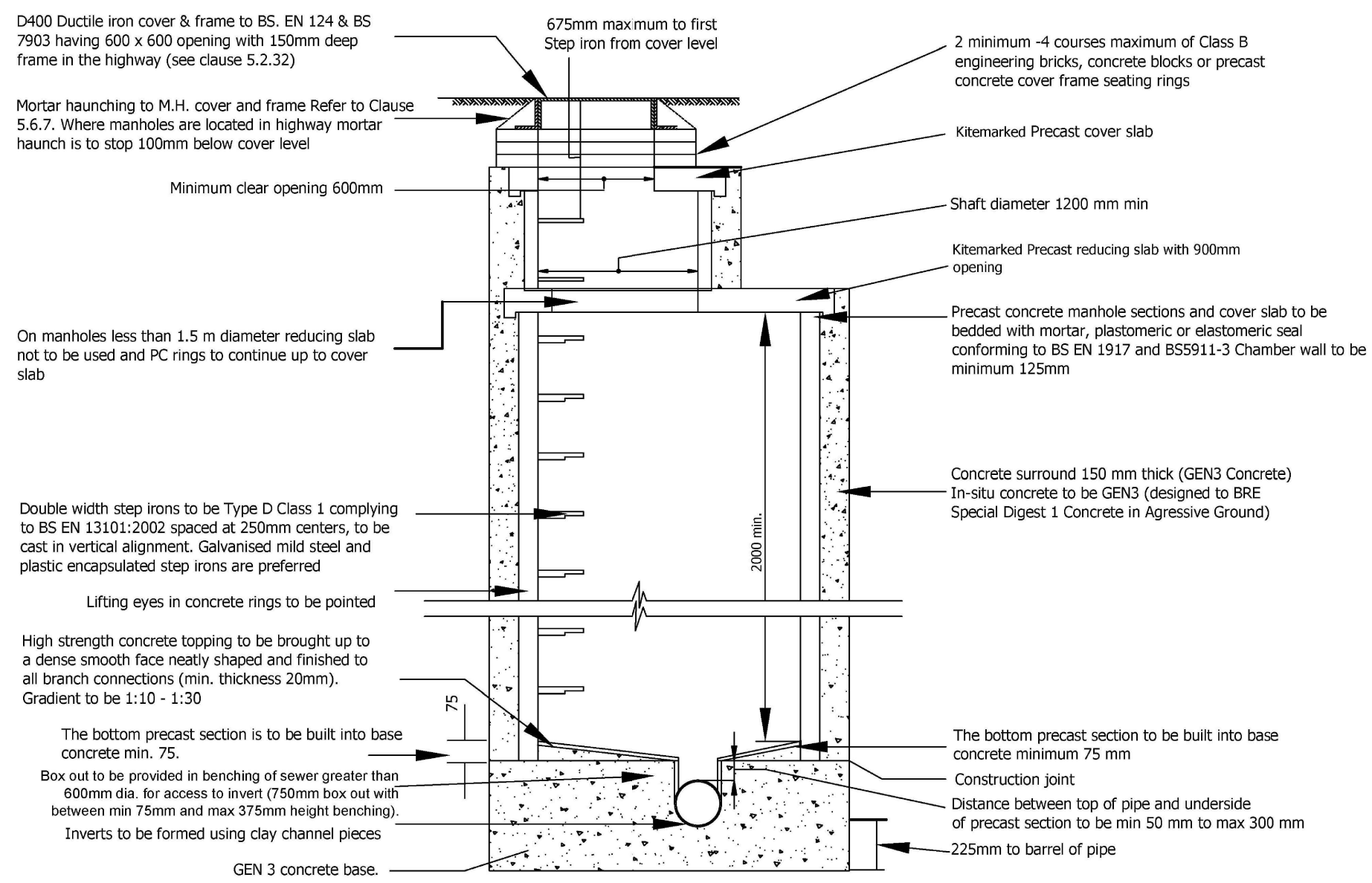


Typical Manhole Construction

Type A1 (Design and Construction Guidance)

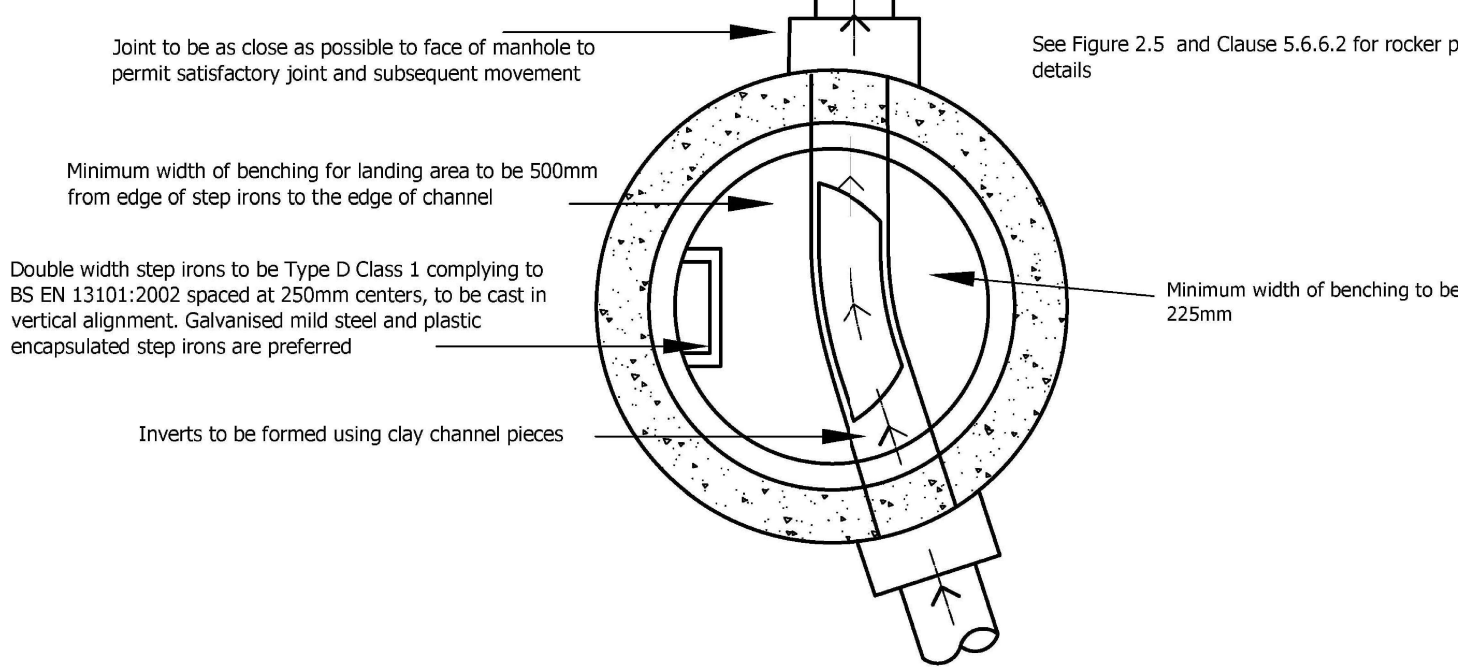
For use on manholes of depth from cover level to soffit of pipe between 3000mm and 8000mm



Section View

Typical Manhole Plan View

Type A and Type B (Design and Construction Guidance)

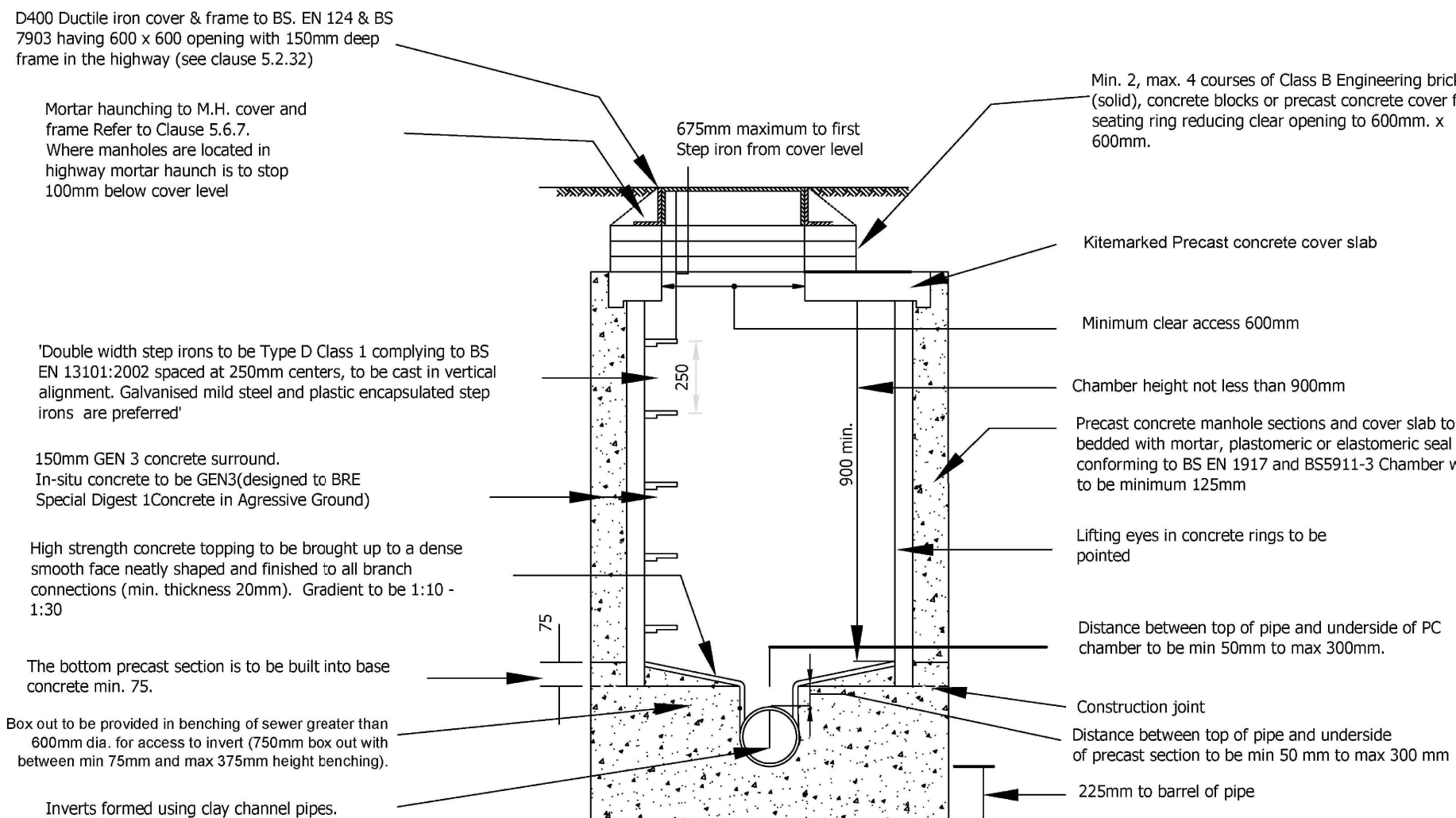


Manhole Diameters	
Nominal internal diameter of largest pipe in manhole (mm)	Minimum nominal internal dimension of manhole (mm)
Up to 300	1200
375-450	1350
500-700	1500
750-900	1800
Greater than 900	Specific detailed drawing required

Typical Manhole Construction

Type B (Design and Construction Guidance)

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

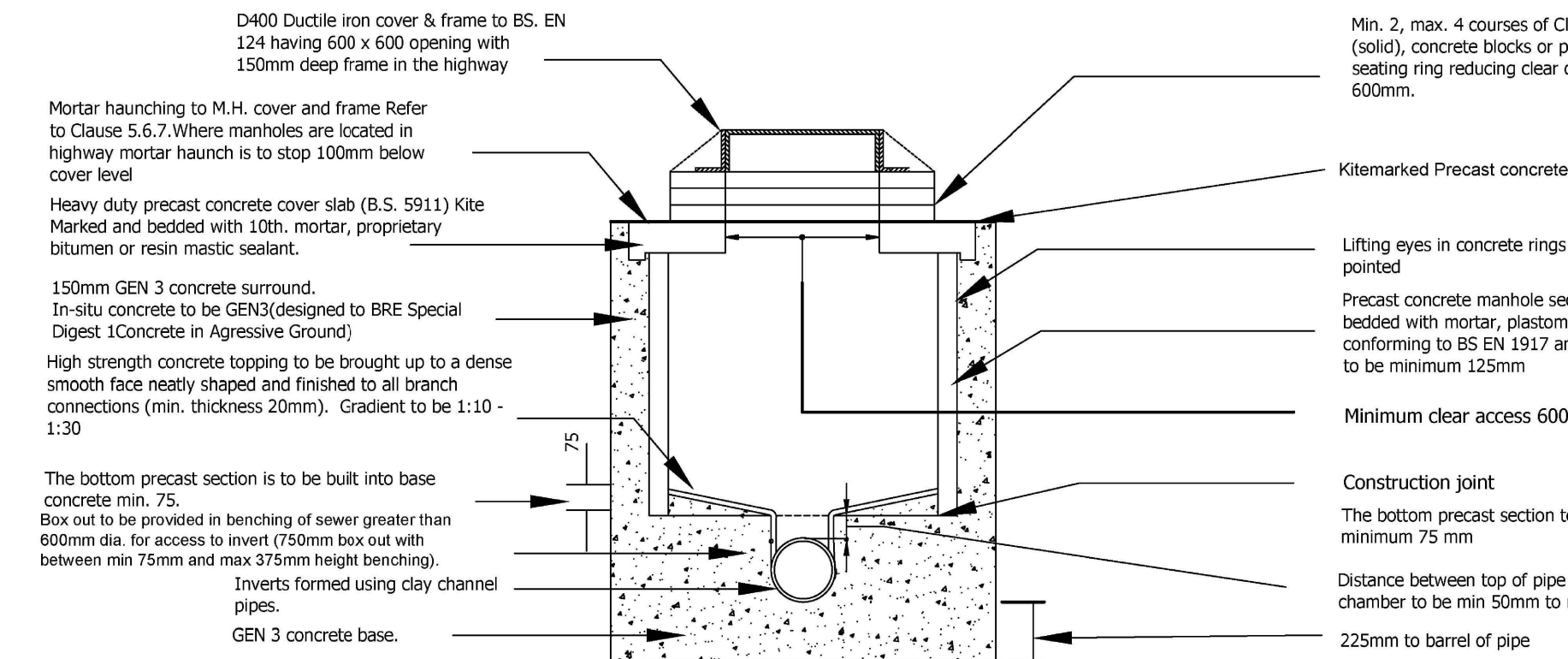


Section View

Shallow Manhole Construction

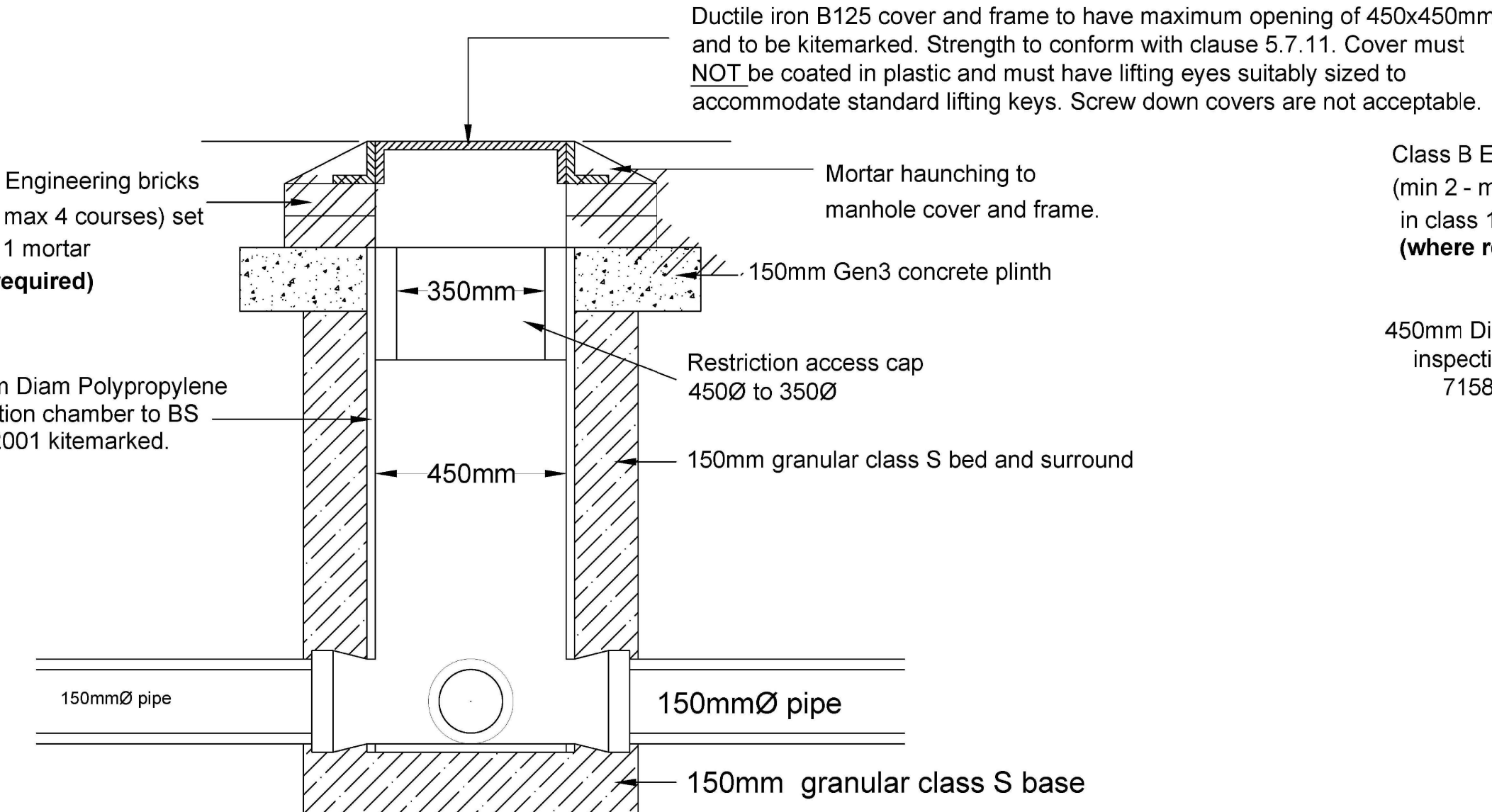
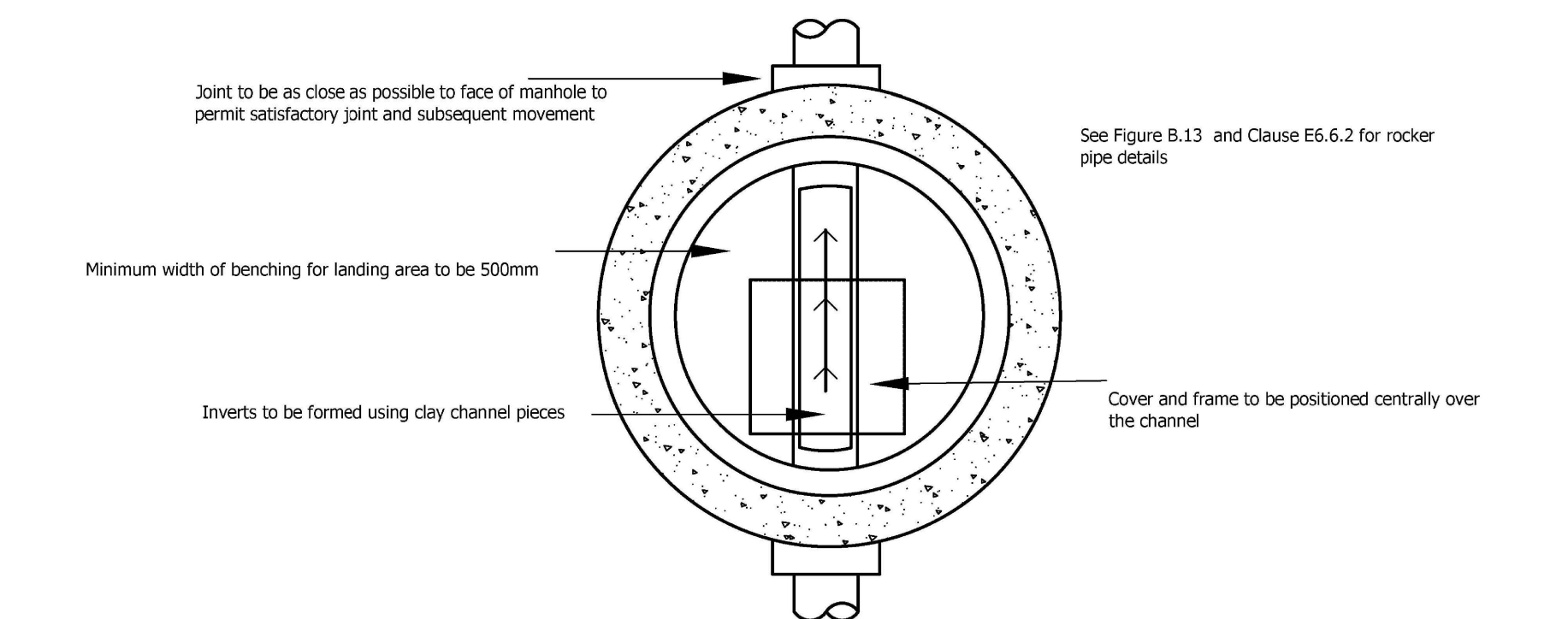
Type C (Design and Construction Guidance)

Construction of manhole where depth from soffit to cover level less than 1.5m



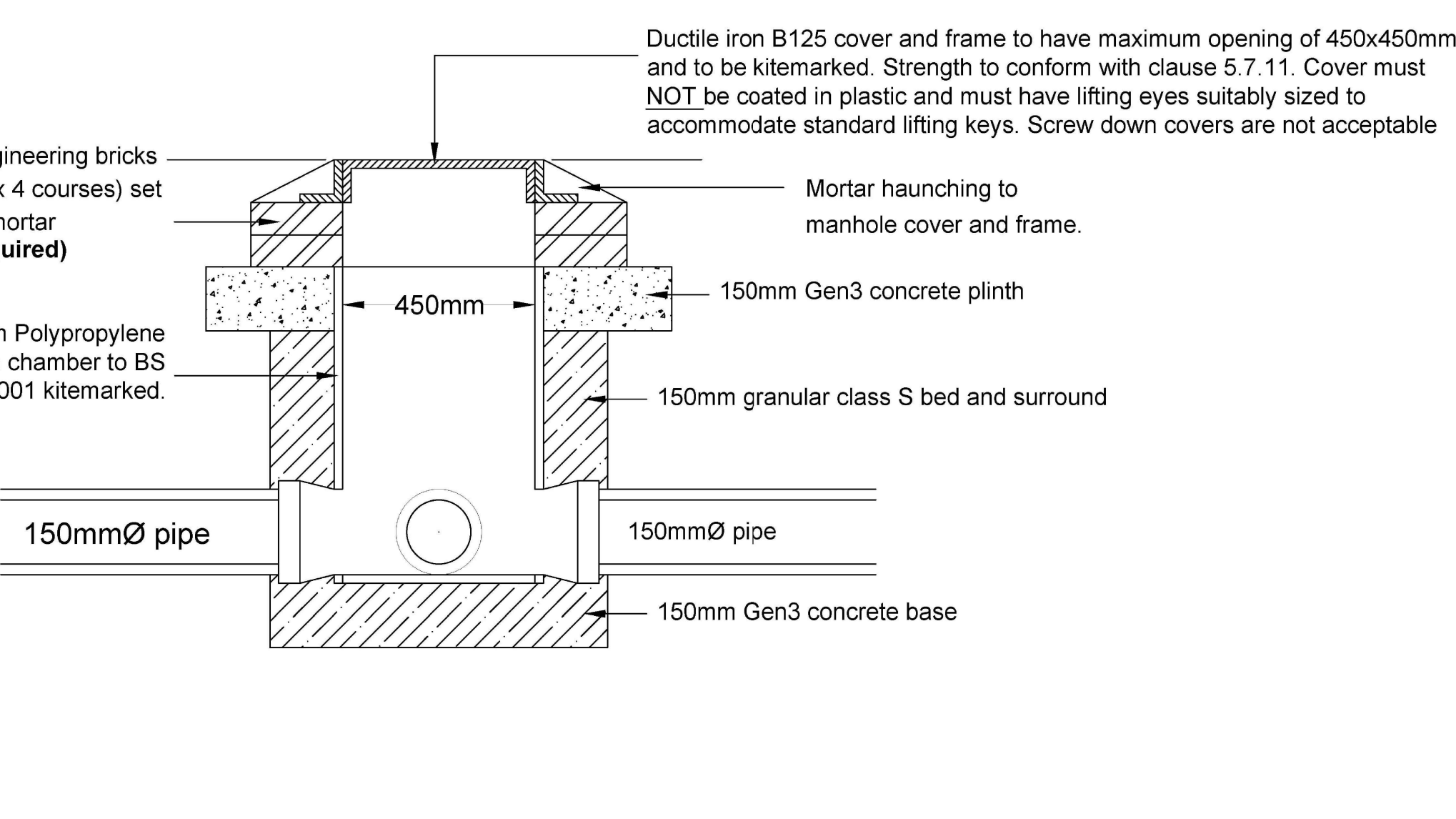
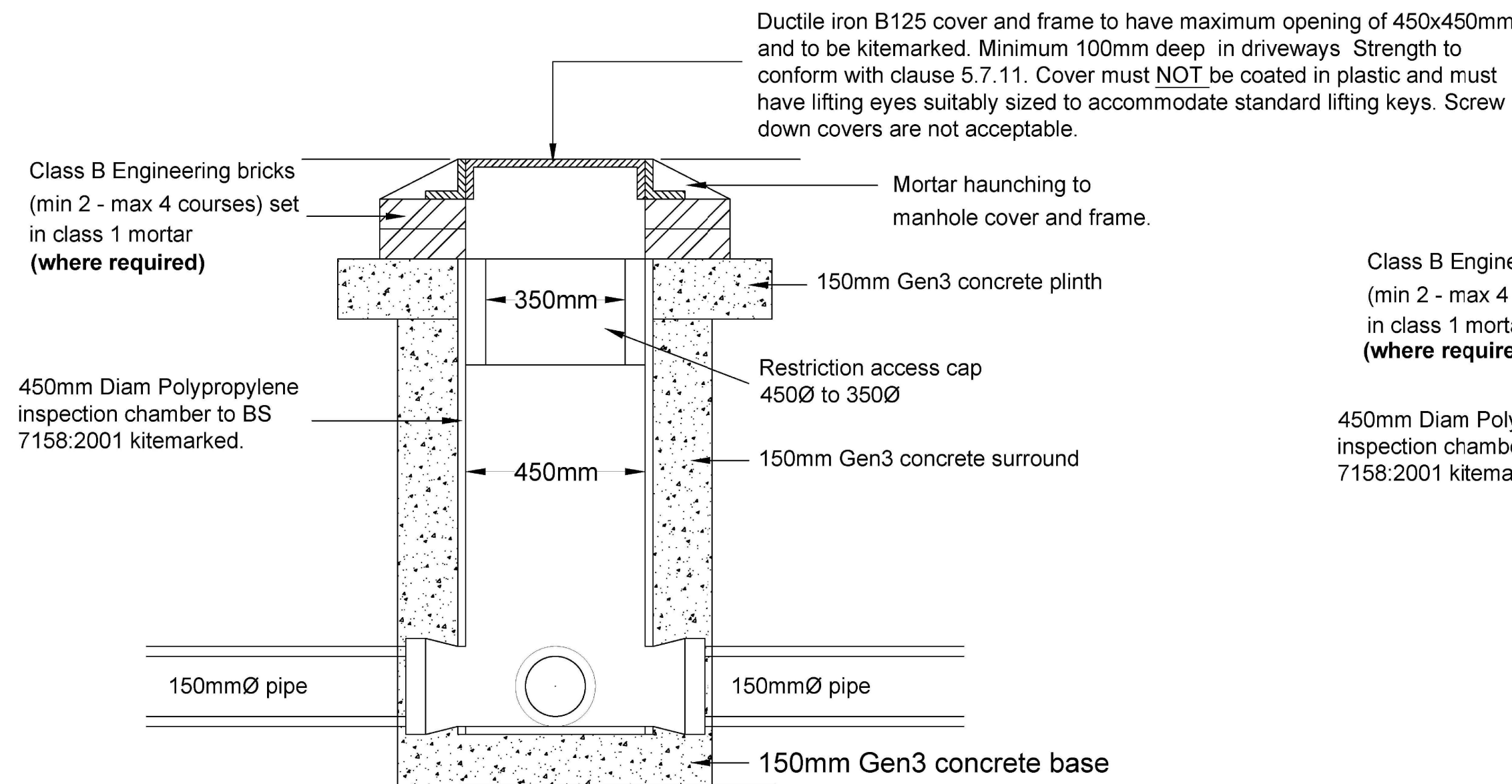
Shallow Manhole Plan View

Type C (Design and Construction Guidance)



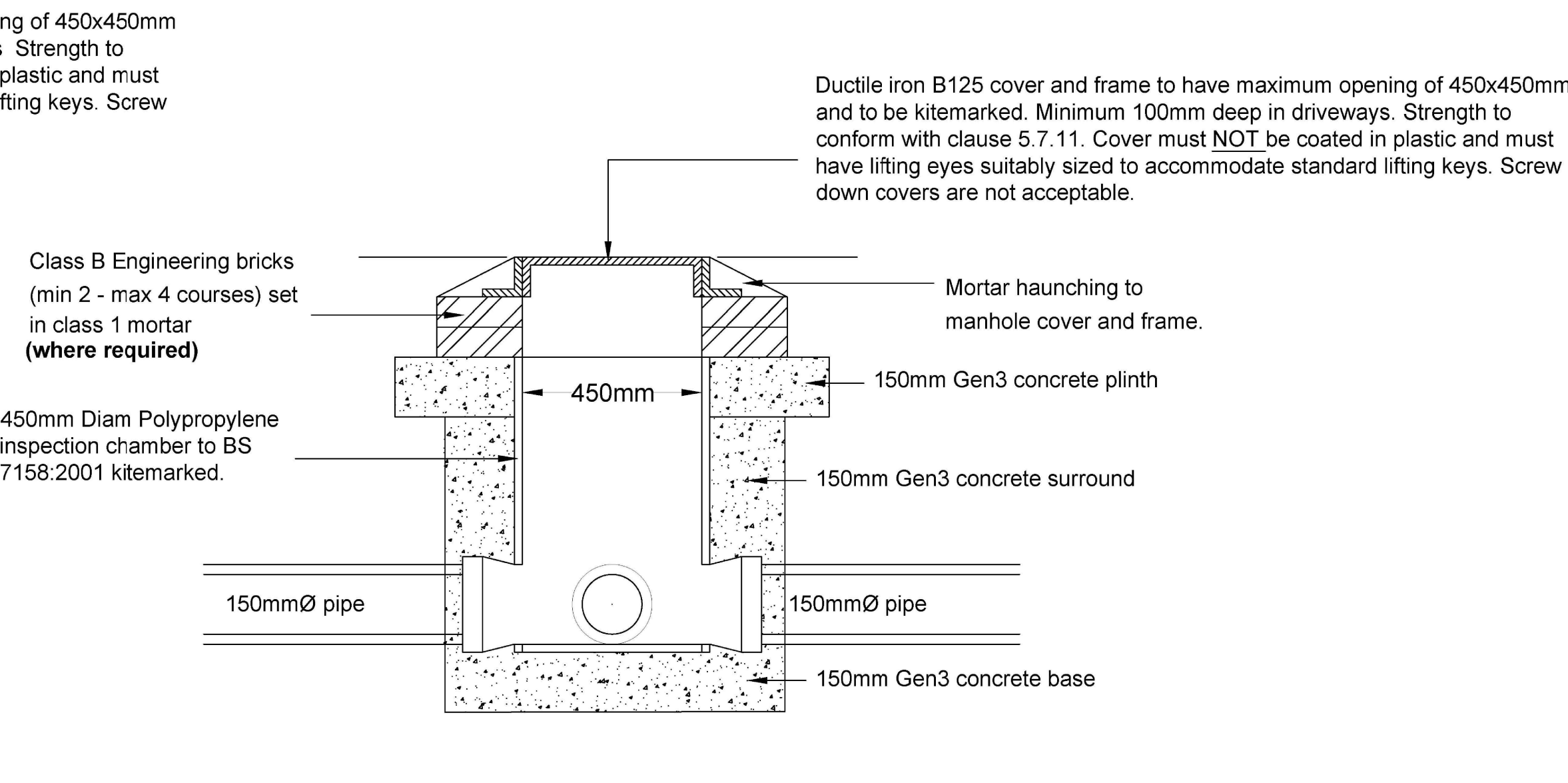
DEMARCATIION CHAMBER LOCATED IN DRIVEWAY

For depth of chamber greater than 1200mm maximum depth 3000mm



DEMARCATIION CHAMBER LOCATED IN DRIVEWAY

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



Pipes

Diameter (mm)	Gradient	S.W.
100	1:80	
150	1:80	1:80

Vitrified clay pipes to BS EN 295 kitemarked. Unplasticised PVC pipes to BS 4660:200 & BS EN 1401-1 kitemarked. Structured Wall Unplasticised PVC pipes to WS 4-35-01 kitemarked.

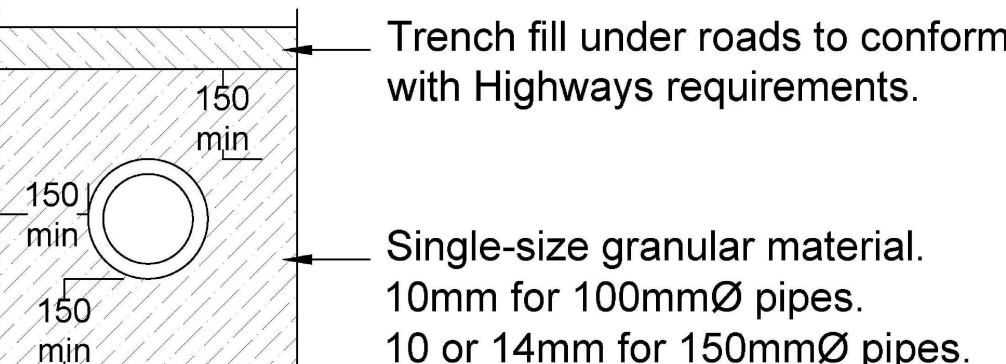
Demarcation Chamber Covers and Frames

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

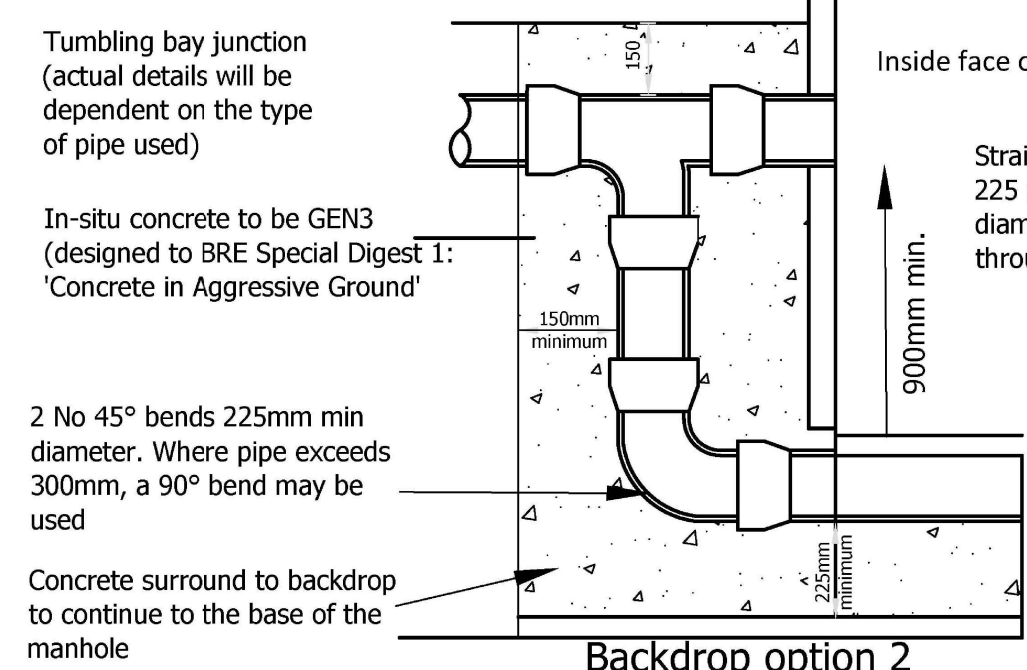
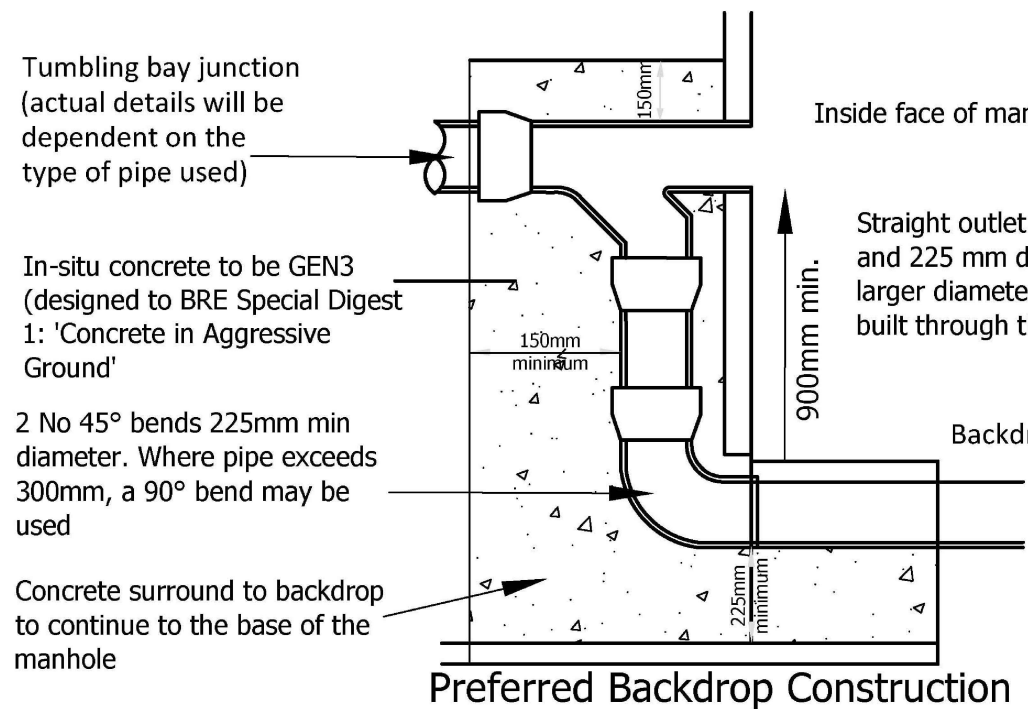
Minimum Depth of Lateral Drains

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

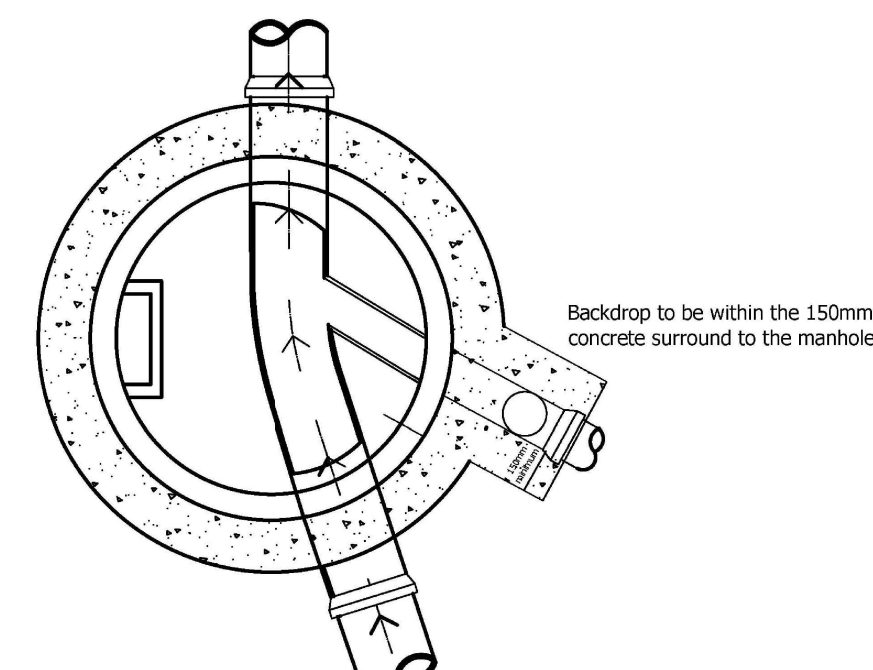
LATERAL DRAIN BEDDING DETAIL



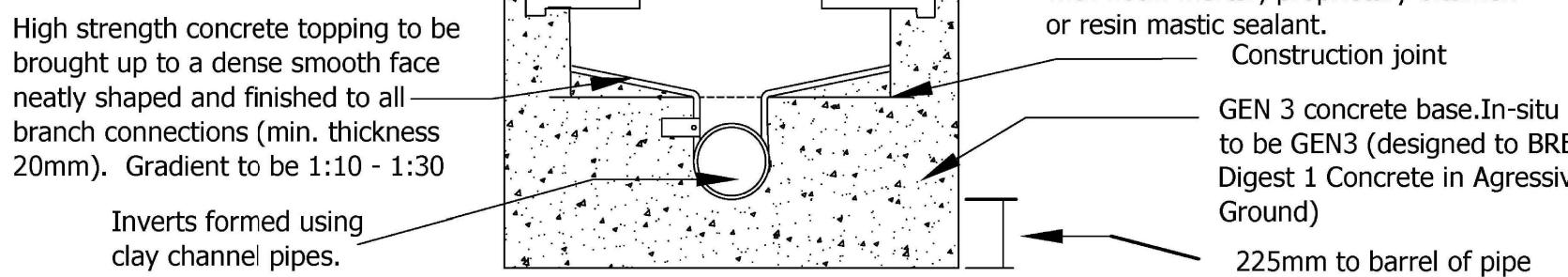
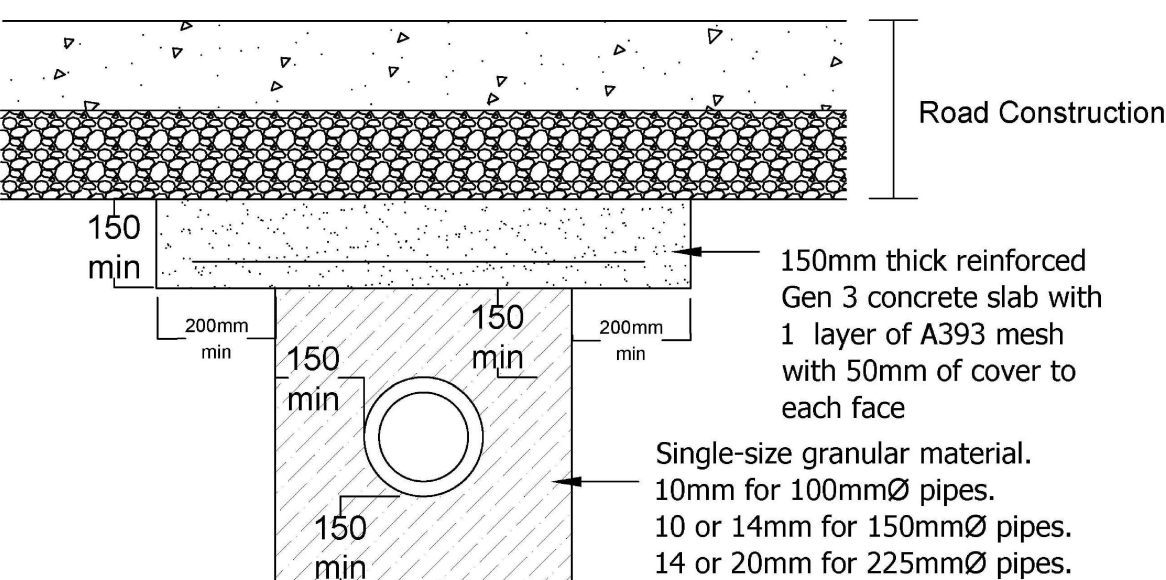
Backdrop Detail



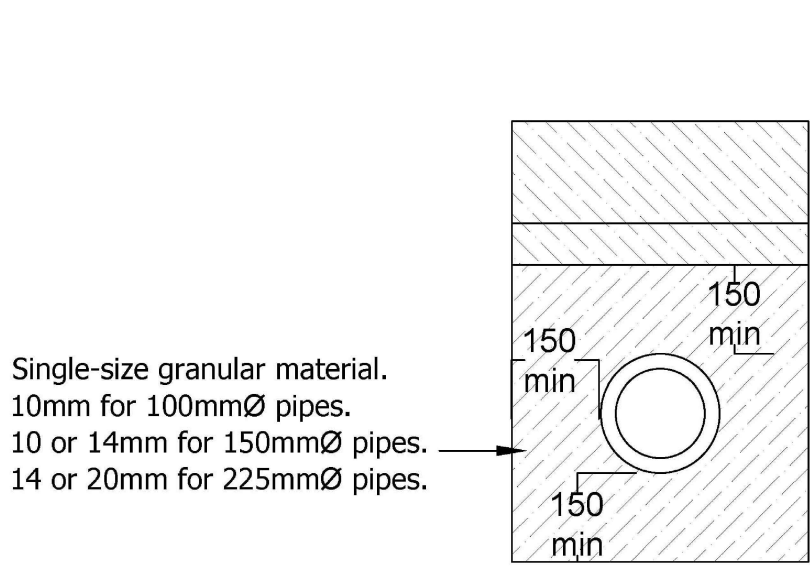
Backdrop Plan View



Shallow Manhole Detail



Section View



Typical Detail through Class S Bed and Surround

Typical Detail through Class S Bed and Surround with Concrete Slab Protection (to be used where sewer is less than 1200mm in depth in trafficked areas and less 900mm in un-trafficked areas)

ALL PIPEWORK 300mm DIAM OR LESS TO BE VITRIFIED CLAY CONFORMING WITH BS 65. MINIMUM CRUSHING STRENGTHS TO BE AS FOLLOWS: 100mm DIA. 40kN/m, 150mm DIA 40kN/m, 225mm DIA 45kN/m, 300mm DIA 72kN/m. ALL PIPEWORK 375mm DIAM OR GREATER TO BE CONCRETE CLASS 120 TO EN 1916 / BS 5911-1:2002. ADOPTABLE SEWERS TO BE LAID IN CLASS 'S' GRANULAR BED & SURROUND.

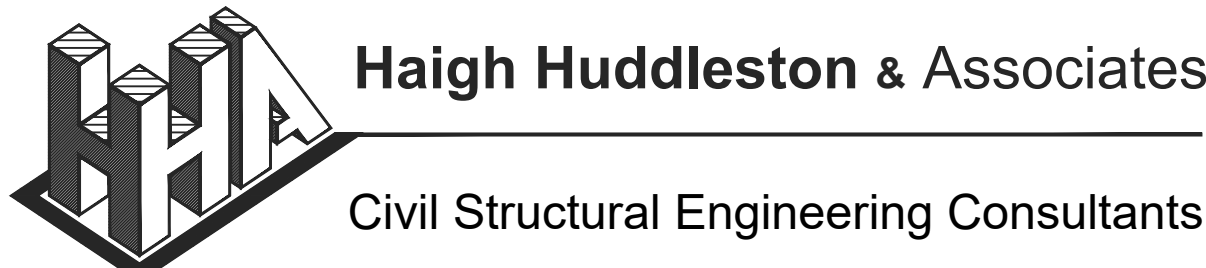
Note
All Drainage works and materials to conform with 'Codes for Adoption'.

Chambers
Type C, D, E & F are non preferred chambers. For type 'B' chambers less than 1.2m from top of benching to the underside of the cover slab, shall have the cover fixed in the centre of the slab and the channels intersecting beneath the cover.

Covers
The minimum size for manhole covers is 600mm by 600mm. Manhole covers to be class D400 and have 150mm deep frames where located in the highway.

Step Irons / Ladders
All step irons shall be double rung and complying clause 4.2.31.
Step irons are required for all manholes, up to 6 metres deep.

Brickwork
All brickwork to be constructed using class B engineering solids.



Firth Buildings, 99 - 101 Leeds Rd, Dewsbury, WF12 7BU
e trevor.haigh@haighhuddleston.co.uk

Client
SB HOMES

Project
LINGARD ROAD, SLAITHWAITE

Detail
STANDARD MANHOLE DETAILS

Dwn Chkd Date Scale Dwg No.
HH AUG-23 NTS@A0 E197567/006