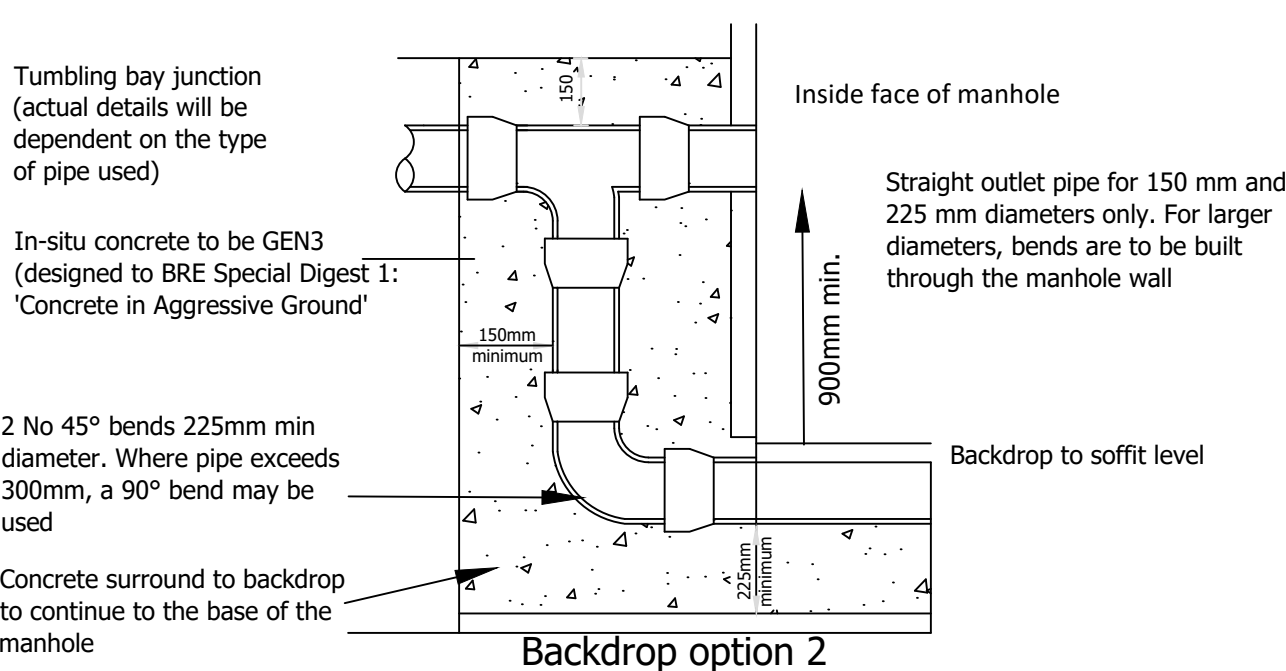
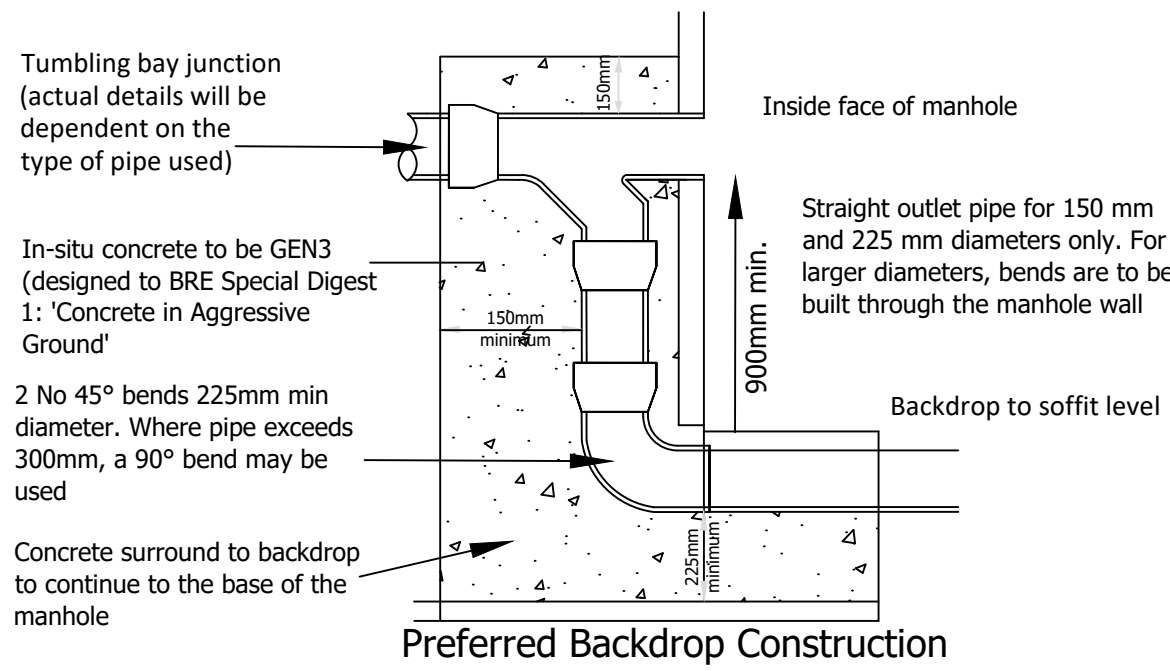
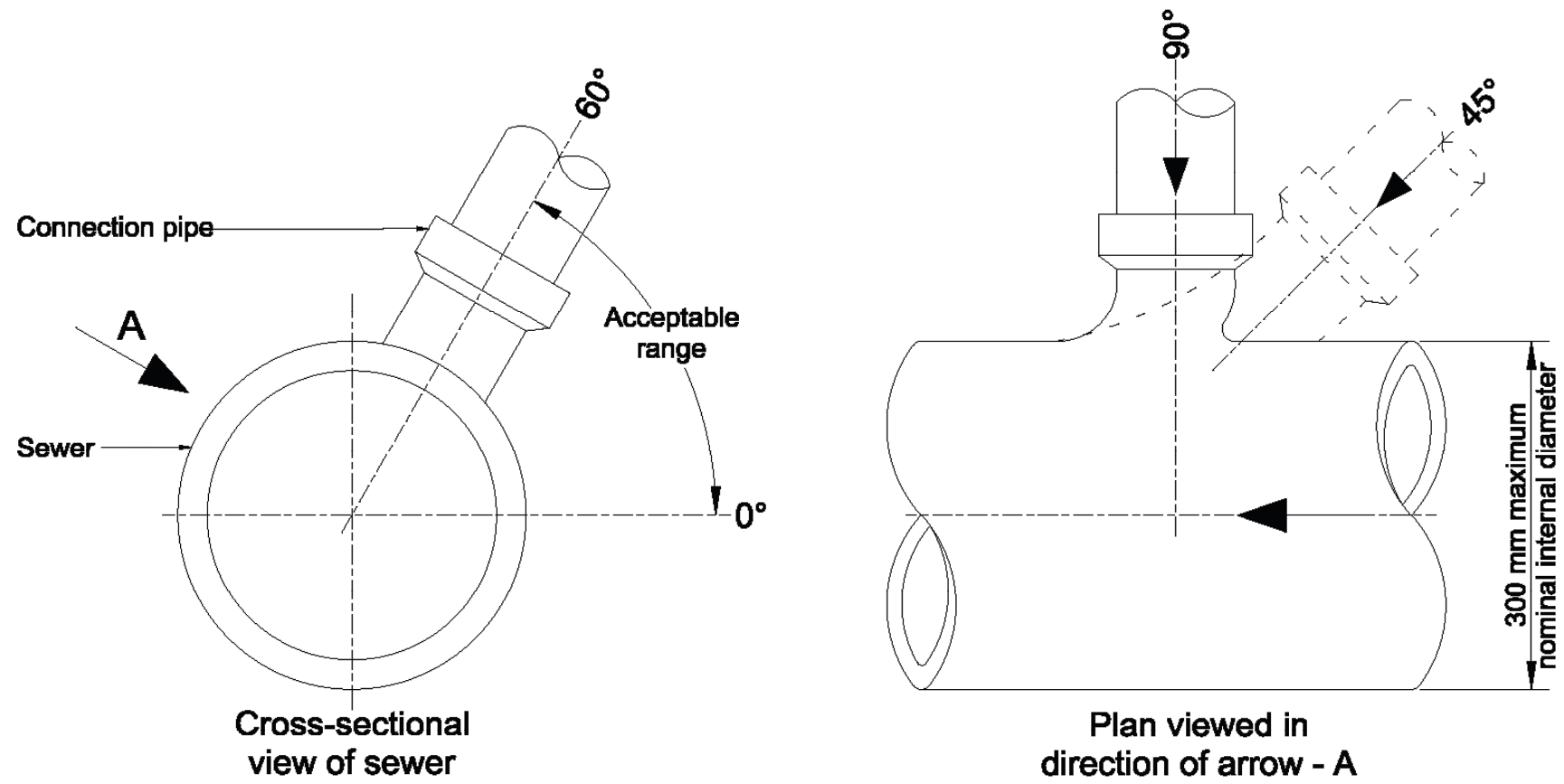
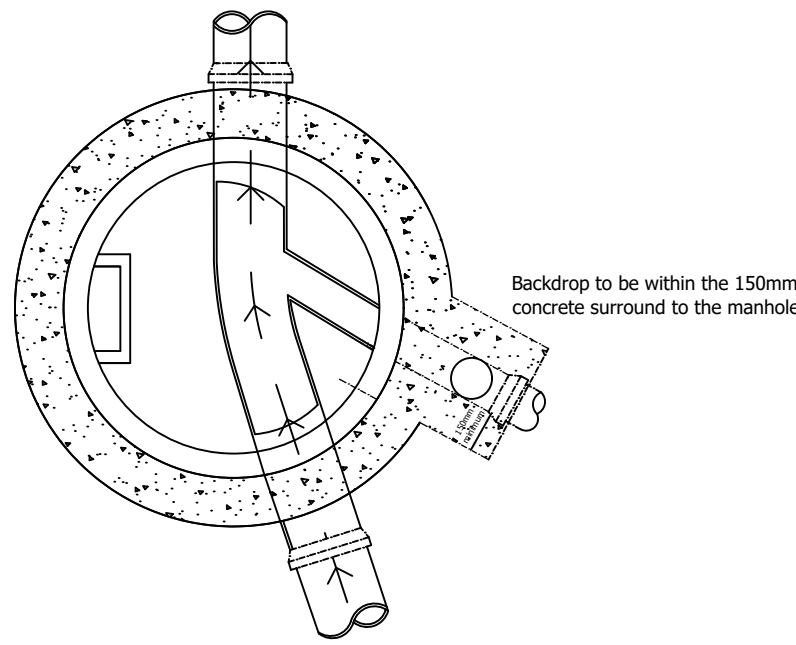


Backdrop details

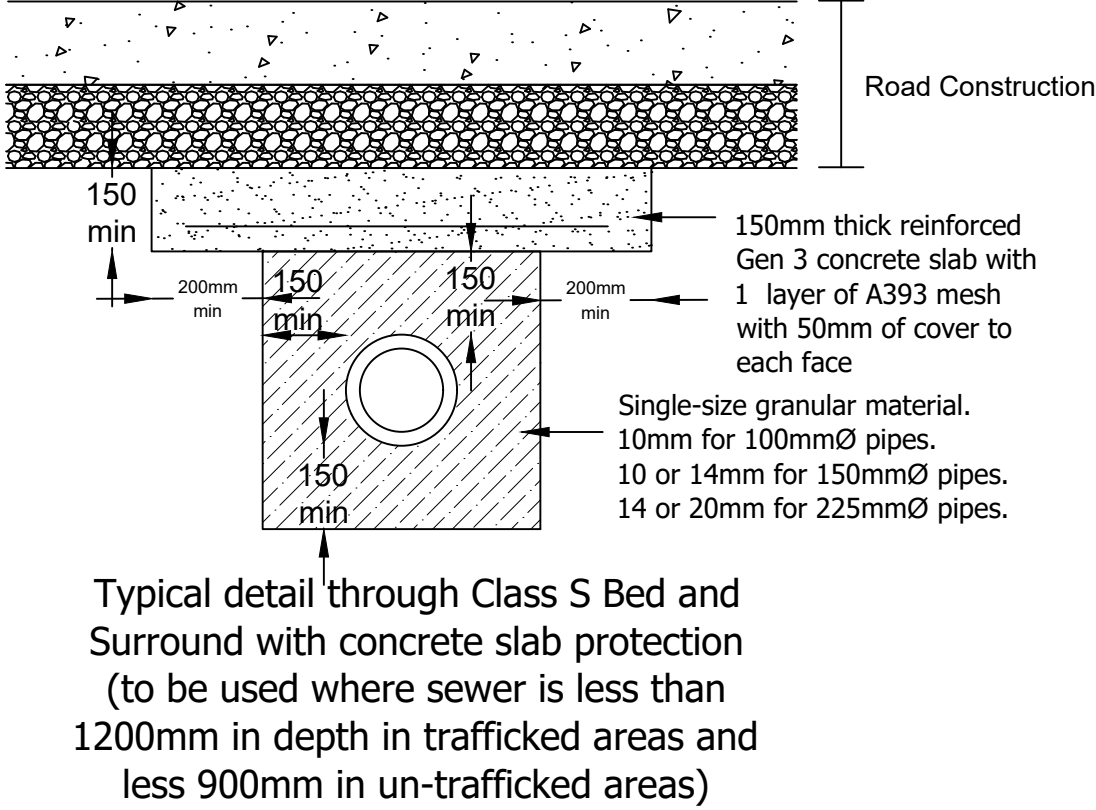
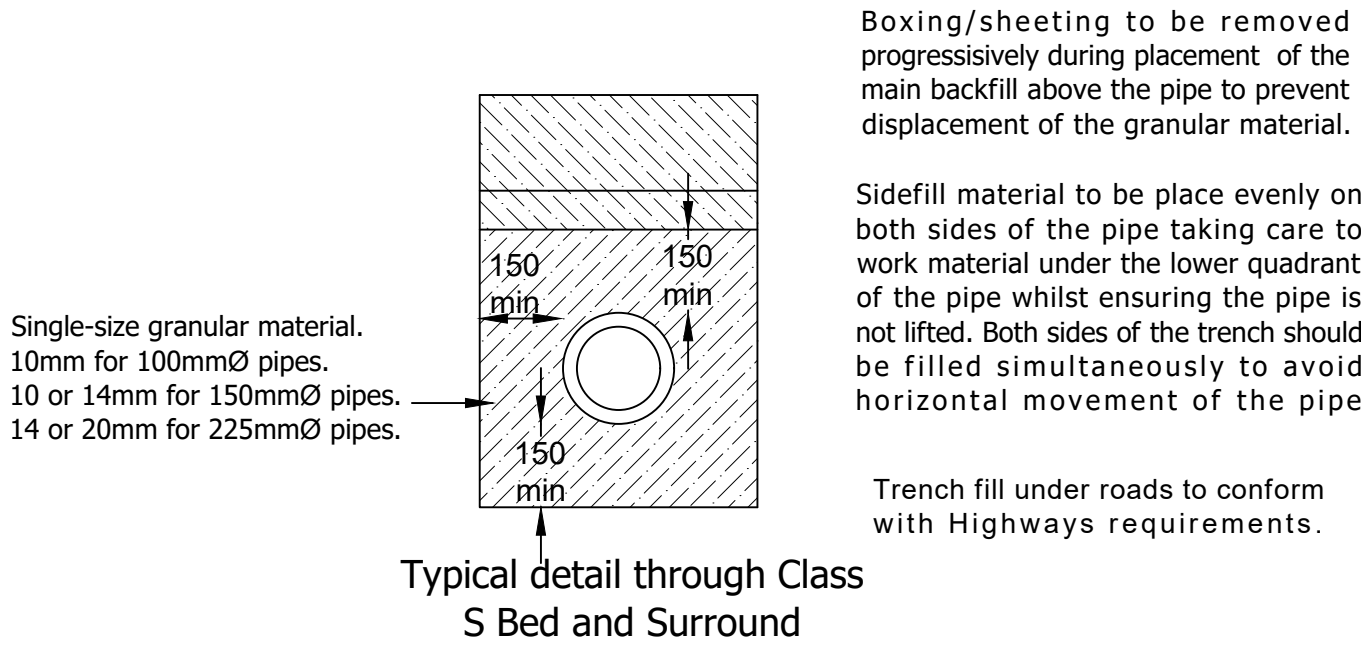


Backdrop plan view

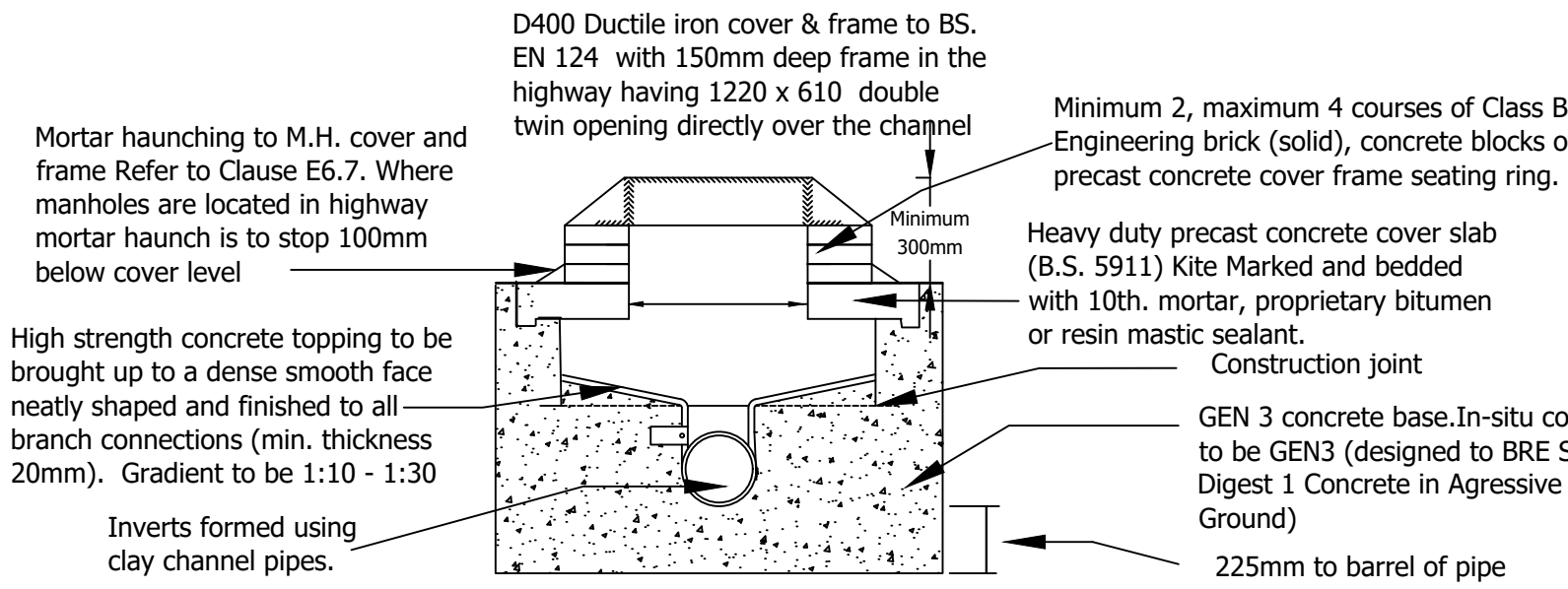


- Where the connection is being made to a sewer with a nominal internal diameter of 300mm or less, connections should be made using 45° angle, or 90° angle curved square junction as shown.
- Connections made with junction fittings should be made by cutting the existing pipe, inserting the junction fitting and joining with flexible repair couplings or slip couplers.
- Where the connection is being made to a sewer with a nominal internal diameter greater than 300mm:
 - where the diameter of the connecting pipe is greater than half the diameter of the sewer, the connection of an access point should be constructed;
 - where the diameter of the connecting pipe is less than or equal to half the diameter of the sewer, then the connection should be made using a performed saddle fitting.
- Connections made with saddle fittings should be made by cutting and safely removing a core from the pipe and joining the saddle fitting to the pipe, in accordance with the manufacturers instructions, to ensure a watertight joint. The connecting pipe should not protrude into the sewer.
- To provide a self-cleaning regime within gravity fall sewers, the minimum flow velocity should be 0.75m per second at one-third design flow. Where this requirements cannot be met, then this criterion would be considered to be satisfied if:
 - a 150mm nominal internal diameter gravity sewer is laid to a gradient not flatter than 1:150 where there are at least ten dwelling units connected; or
 - a sewer or lateral drain with a nominal internal diameter of 100mm, or a lateral drain serving ten or less properties is laid to a gradient not flatter than 1:80, where there is at least one WC connected and 1:40 if there is no WC connected.

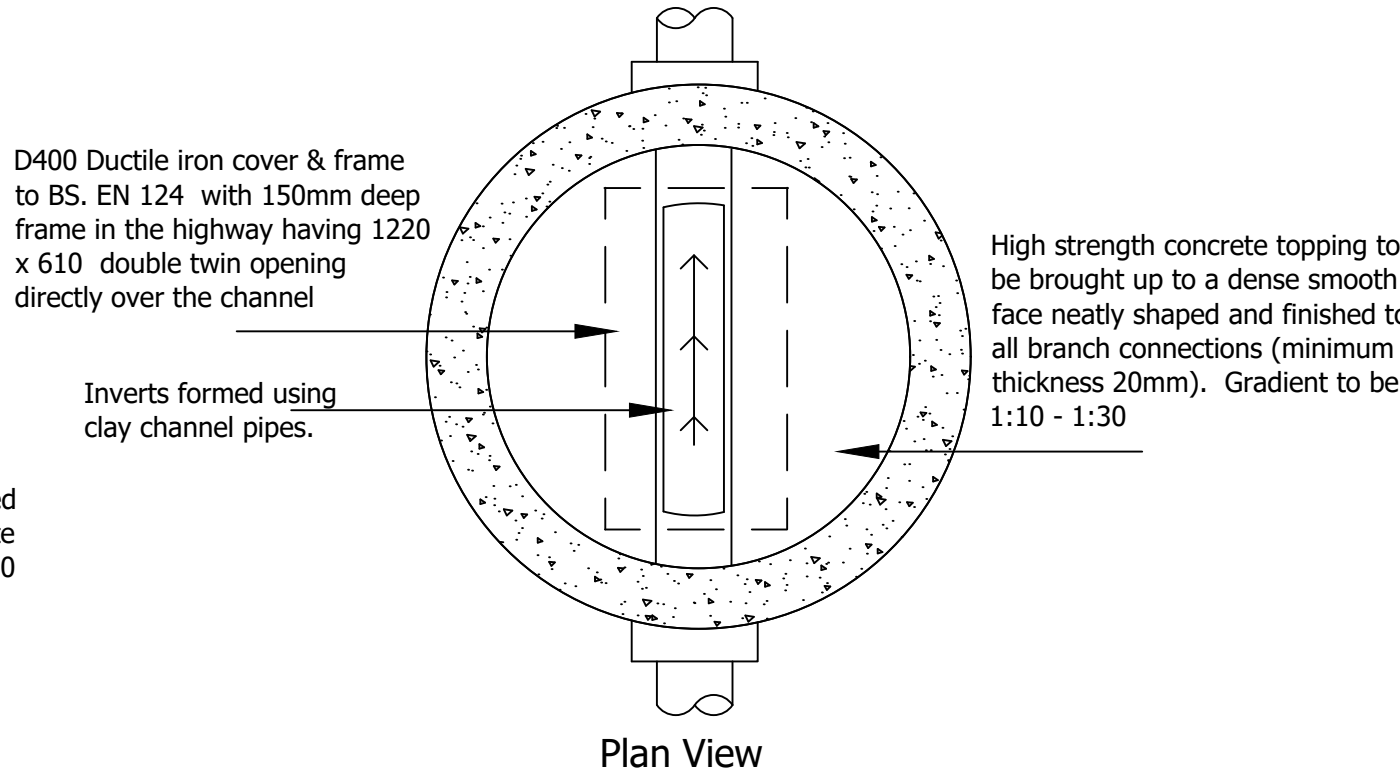
Pipe surround details



Shallow Manhole detail

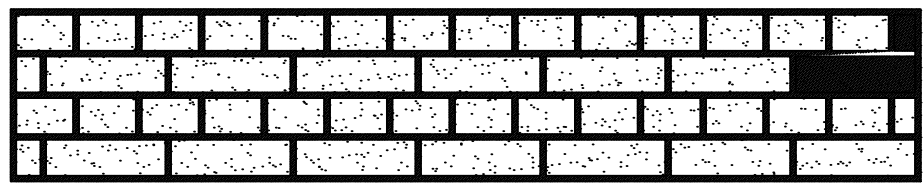


Section View

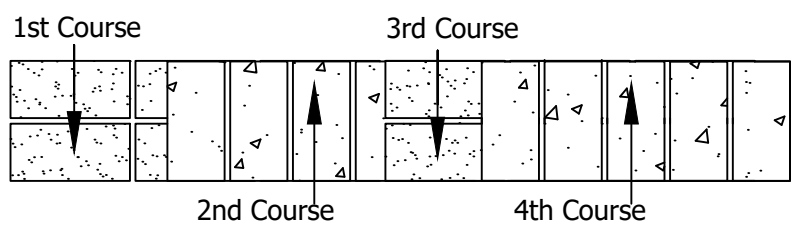


Brickwork detail

All brickwork to be minimum 2 - maximum 4 courses of Class B engineering bricks constructed in English Bond



English Bond



Brickwork plan view

Tank access detail details

Standard tank access

D400 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) 1:3 cement mortar bed and haunch

2 minimum -4 courses maximum of Class B engineering bricks, concrete blocks or precast concrete cover frame seating rings

Tank access construction with kitemarked 1220 x 750mm pre cast concrete rectangular sections with single 600x600mm D400 twin cover and frame. Turrets must be water tight otherwise a 150mm Gen 3 concrete surround to be provided

Minimum 900x600mm access in top of tank

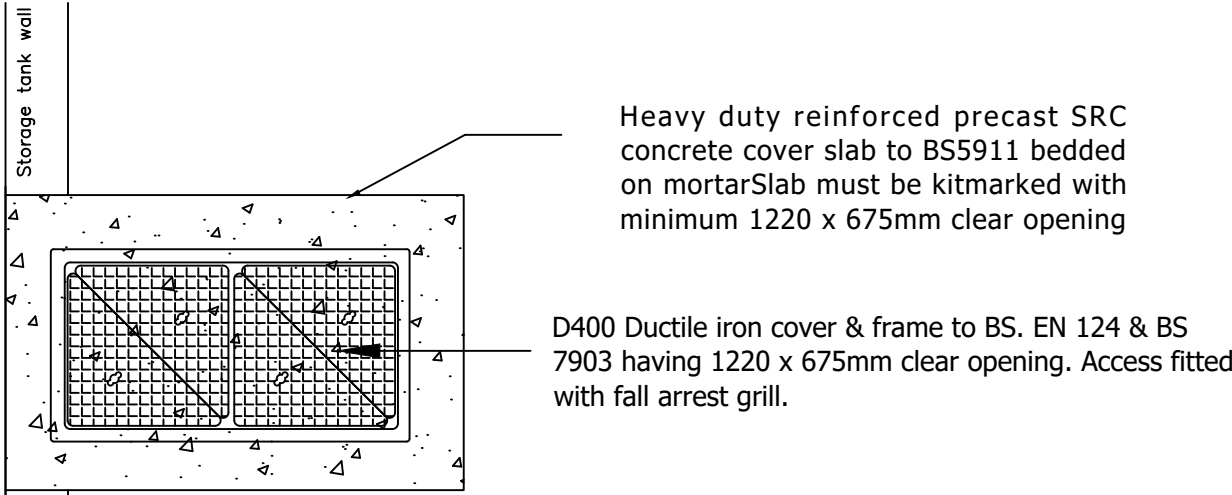
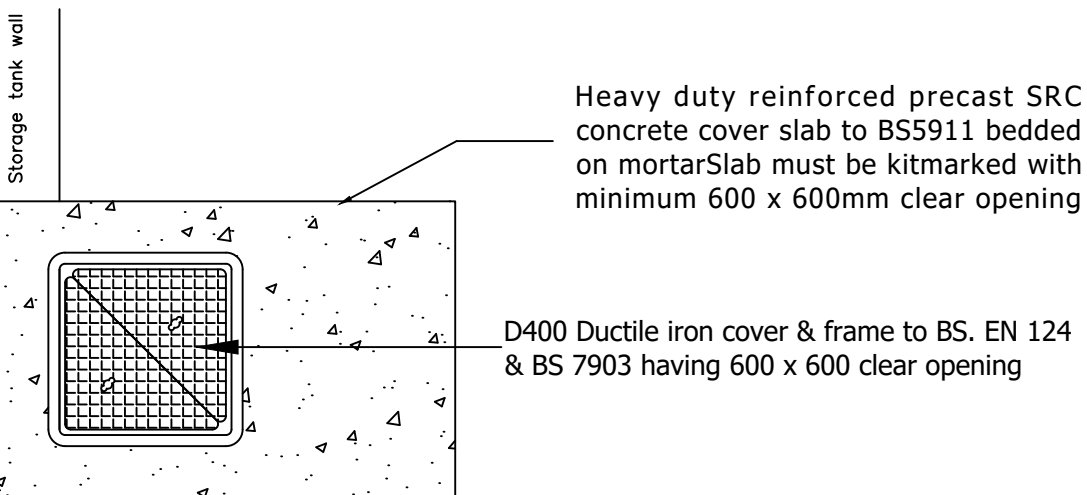
Access over tank inlet/outlet points

D400 Ductile iron cover & frame to BS. EN 124 & BS 7903 having 1220 x 675mm opening with 150mm deep frame in the highway (see clause 5.2.32) 1:3 cement mortar bed and haunch. Access fitted with fall arrest grill.

Fall arrest grill (Full manufacturer details to be provided)

Tank access construction with kitemarked 1220 x 750mm pre cast concrete rectangular sections 600x600mm D400 double twin cover and frame. Turrets must be water tight otherwise a 150mm Gen 3 concrete surround to be provided

Minimum 900mm x 600mm access in top of tank

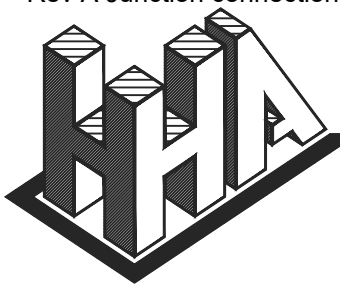


ALL PIPEWORK 300mm DIAM OR LESS TO BE VITRIFIED CLAY CONFORMING WITH BS 65. MINIMUM CRUSHING STRENGTHS TO BE AS FOLLOWS: 100mm DIA. 40kN/m, 150mm DIA 40kN/m, 225mm DIA 45kN/m, 300mm DIA 72kN/m.

ALL PIPEWORK 375mm DIAM OR GREATER TO BE CONCRETE CLASS 120, 54kN/m MINIMUM CRUSHING STRENGTH. ADOPTABLE SEWERS TO BE LAID IN CLASS 'S' GRANULAR BED & SURROUND.

Rev A Junction connection detail added

27.06.25 HH



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Client

SB HOMES

Project

LINGARD ROAD, SLAITHWAITE

Detail

STANDARD MANHOLE DETAILS - 4 of 4

Dwn

Chkd

Date

Scale

Dwg No.

HH

JAN-25

NTS@A1

E19/7567/006-04A

For all clause and table references please refer to Design and Construction Guidance contained within the Code for Adoption 2.0 published 10th March 2020

RISK ASSESSMENT: SIGNIFICANT RISKS THAT CANNOT BE DESIGNED OUT		
RISK	LEVEL OF RISK (30)	SUGGESTED ACTION
DEEP EXCAVATIONS ASSOCIATED WITH NEW DRAINAGE WORKS	HIGH	ENSURE ALL EXCAVATIONS HAVE ADEQUATE TRENCH SUPPORTS
HANDLING LARGE DIAMETER MANHOLE RINGS AND CIRCULAR PIPES	HIGH	USE CORRECT LIFTING EQUIPMENT AND ENSURE OPERATIVES WEAR APPROPRIATE PROTECTIVE CLOTHING AND HARD HATS/CORRECT PPE
CONTACT WITH SEWAGE	MED	OPERATIVES TO USE CORRECT BREATHING EQUIPMENT/CORRECT PPE
NOISE	MED	OPERATIVES TO USE CORRECT EAR PROTECTION/CORRECT PPE
DRAINAGE EXCAVATIONS ADJACENT EXISTING BOUNDARY STRUCTURES	HIGH	ENSURE CORRECT SUPPORTS ARE PROVIDED TO TRENCHES AND BUILDINGS WHERE REQUIRED
DRAINAGE EXCAVATION IN PUBLIC HIGHWAY	HIGH	ENSURE CORRECT USE OF TRENCH SUPPORTS IN EXCAVATION AND SCREEN BARRIERS TO PROTECT MEMBERS OF THE PUBLIC
MAINTAIN ACCESS TO ADJACENT PROPERTIES AND OCCUPIERS	HIGH	ENSURE WORKS ARE PROTECTED WITH BARRIERS AND SIGNS TO GUIDE THE PUBLIC AWAY FROM THE WORKS
DRAINAGE EXCAVATIONS NEAR TO EXISTING SERVICES	HIGH	ENSURE WORKS ARE PROTECTED WITH BARRIERS AND SIGNS TO GUIDE MEMBERS OF THE PUBLIC AWAY FROM THE AREA
WORKING IN CONFINED SPACES. WORKING IN DRAINS AND MANHOLES	HIGH	CONFINED SPACES WORKING TRAINED PERSONNEL ONLY TO CARRY OUT WORKS UNDER A PERMIT TO WORK SCHEME IMPLEMENTED BY CONTRACTOR. GAS TESTING TO TAKE PLACE BEFORE ALL ENTRIES TO CONFINED SPACES
WORKING IN HIGHWAYS / RISKS FROM VEHICLE AND PLANT	HIGH	ALL WORKS TO BE SIGNED AND FENCED FROM NORMAL VEHICULAR TRAFFIC. ALL WORKERS TO WEAR HIGH VISIBILITY CLOTHING. ALL PLANT TO HAVE VISUAL AND AUDIBLE WARNING SYSTEMS
ROAD AND DRAINAGE CONSTRUCTION	HIGH	ALL EXCAVATIONS TO BE ADEQUATELY FENCED OFF AND SUPPORTED DURING CONSTRUCTION. ALL OPERATIVES TO BE TRAINED IN CORRECT METHODS OF LIFTING AND WORK IN ACCORDANCE WITH LOLER REGS
IT IS ASSUMED THAT WORKS ASSOCIATED WITH THIS DESIGN WILL BE UNDERTAKEN BY A PERSON OR PERSONS WHO ARE COMPETENT AND HAVE THE REQUIRED LEVEL OF EXPERIENCE AND EXPERTISE		