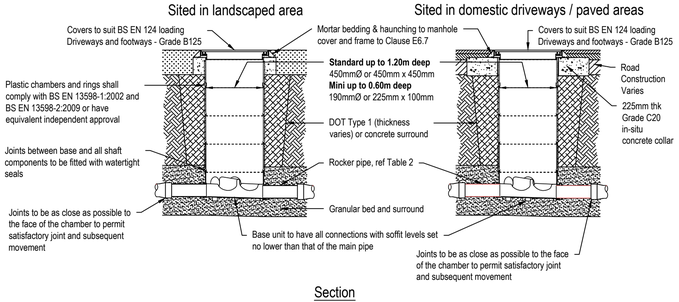
NOTES:

1. Do not scale from this drawing. This drawing shall be read in conjunction with all other relevant Architect's and Engineer's drawings.
2. Any discrepancies, ambiguities, or anomalies in the information provided on this or any of the engineering drawings package must be reported prior to work proceeding.
3. All accommodation work deemed necessary to facilitate a satisfactory link between the new works and the existing to be undertaken by the developer.
4. It is the contractor's responsibility to locate all existing services and verify their level & location prior to commencing any works. Should they be affected by the works then the respective statutory undertaker should be contacted and any special protection requirements agreed.
5. All highway works shall be undertaken in accordance with the Local Highway Authorities Design Guide and Specification and strictly in accordance with the 'Specification for Highway Works'. All drainage works shall be undertaken in accordance with the 'Design & Construction Guidance', and any other Regional Water company requirements. All works to be supervised/inspected as required by the relevant Inspector.
6. All works must comply with current Health and Safety guidance & standards. All temporary signing to comply with Traffic Signs Manual - Chapter 8.
7. All products are to be installed and maintained strictly in accordance with manufacturer's recommendations & guidelines.

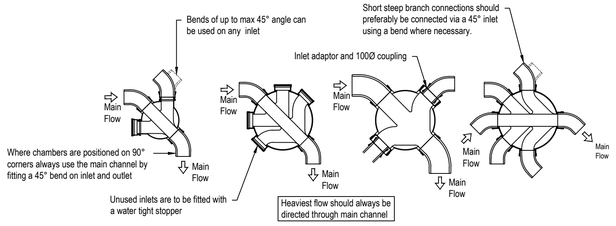
Private drainage Typical Inspection Chamber Detail (Flexible material detail)

Max. depth 1.20m non entry

(Scale 1:25)

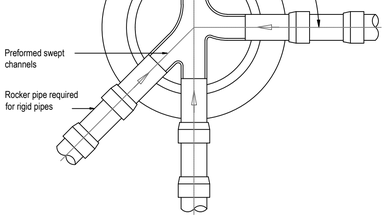


Section



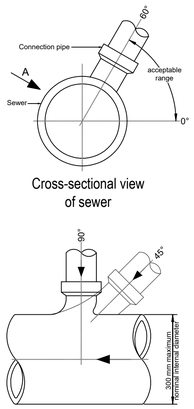
Alternative Base Layouts

Typical Arrangement of pipe junctions within manholes



Sectional Plan

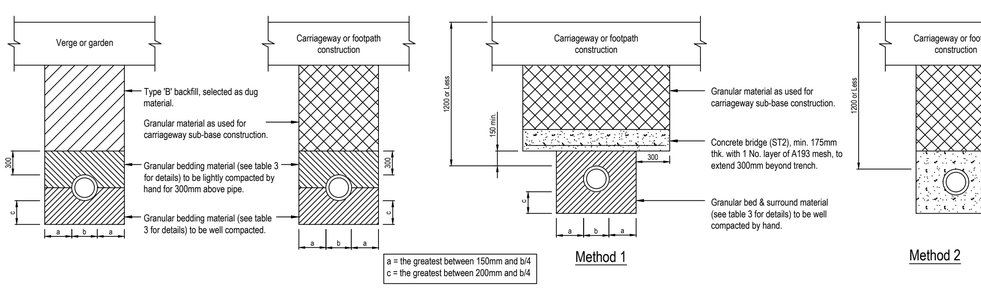
Connections to sewer



Plan viewed in direction of arrow - A

Pipe Bedding Details (Sewers)

(NTS)



Under verge or garden (Bedding class 'S')

Under carriageway or footpath (Bedding class 'S')

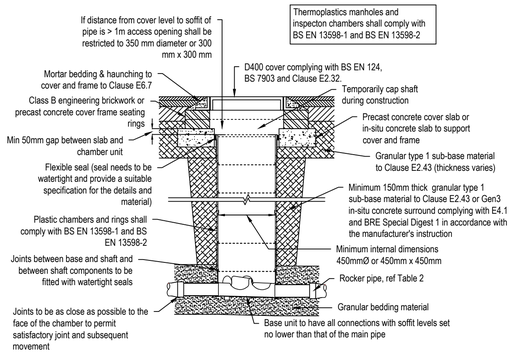
Method 1

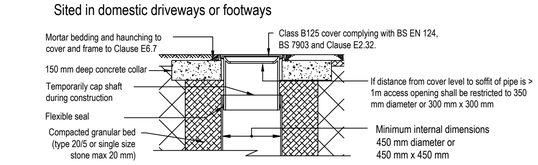
Method 2

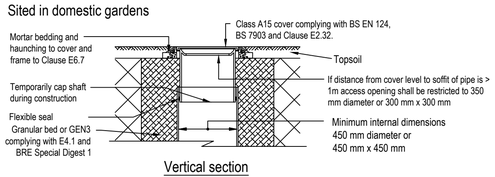
Under carriageway or footpath when cover to crown of pipe is 1200mm or less

Typical Inspection Chamber Detail -Type 'D' (Flexible material detail)

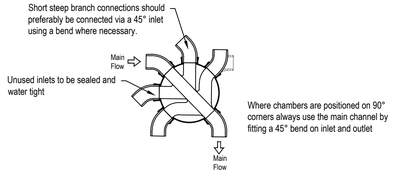
Max. depth from cover level to soffit of pipe 3.0m



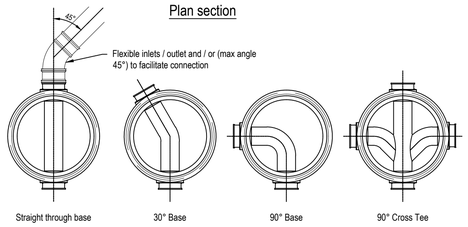




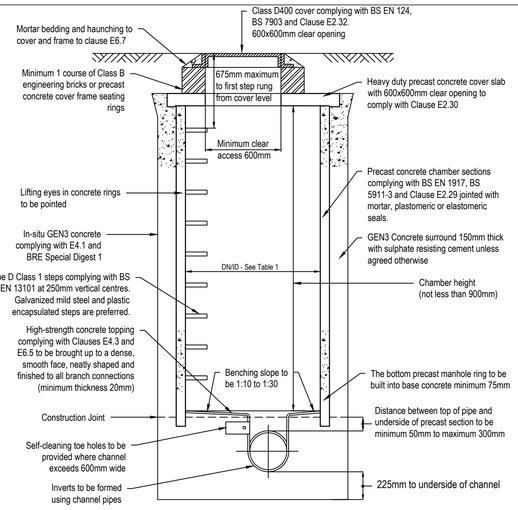
Vertical section



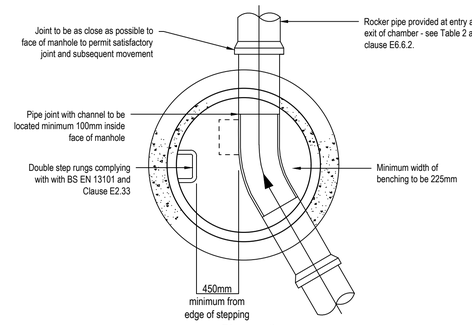
Plan section



Alternative Base Layouts



Vertical section



Plan section

Typical Manhole Detail - Type 'B'

Depth from cover level to soffit of pipe 1.5m to 3.0m

Table 1 - Manhole diameter

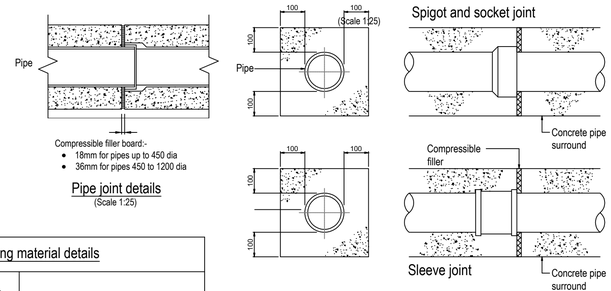
Nominal Internal Diameter of largest pipe in manhole (mm)	Minimum Nominal Internal dimension of manhole (mm)
Less than 375 375 to 450 500 to 700 750 to 900 Greater than 900	1200 1350 1500 1800 Pipe diameter + 900

Sizes shown are the minimum. Where 2 or more pipes enter a manhole, the manhole size should be sufficient to accommodate adequate benching.

Table 2 - Rocker pipe length

Nominal diameter of pipe (mm)	Maximum effective length (m)
150 to 600 601 to 750 Over 750	0.6 1.0 1.25

Joints for concrete encased pipes



Note: At each flexible pipe joint a joint filler (e.g. fibreboard or polystyrene) shall be used (see table below), and shall extend through the full thickness of any concrete in contact with the pipe. The concrete bed shall be cut away at each joint to give a clearance of at least 50mm, so that the joint does not bear on the bed.

Compressible filler and packing for pipelines

Nominal diameter of pipe (mm)	Thickness of compressible filler (mm)
Less than 450 450 - 1200 Exceeding 1200	18 36 54

Table 3 - Pipe bedding material details

Nominal size of pipes (mm)	Maximum particle size (mm)	Imported granular materials
100	10	10mm Nominal single-size
Over 100 to 150	14	10 or 14mm Nominal single-size or 14mm to 5mm graded
Over 150 to 300	20	10, 14 or 20mm Nominal single-size or 14mm to 5mm graded or 20mm to 5mm graded
Over 300 to 550	20	14 or 20mm Nominal single-size or 14mm to 5mm graded or 20mm to 5mm graded
OVER 550	40	14, 20 or 40mm Single-size or 14mm to 5mm graded or 20mm to 5mm graded or 40mm to 5mm graded

(1) Processed granular material to include aggregate to BS EN 13242

(2) Material designated Type 'B' used under gardens and verges shall consist of uniform readily compactable material, free from tree roots, vegetable matter, building rubbish and frozen soil, and excluding clay lumps retained on a 75mm sieve and stones larger than 37mm. Bedding to be compacted in 225mm layers.

(3) Material designated Type 'B' used under roads and footpaths shall consist of granular material as used for carriageway sub-base construction.

PRELIMINARY

Rev:	Date:	Description:

Client: **W E Black Ltd.**

Project: Land at Blackmore Way, Uxbridge

Drawing Title: Drainage Construction Details (Sheet 1 of 2)

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Designed:	Drawn:	Checked:
FD	SRC	----
Scale: As shown @A1	Date: Aug 2024	Approved: ----
Drawing Number: 619:004		Revision: -

1:25 (0, 0.5, 1, 1.5, 2, 2.5)