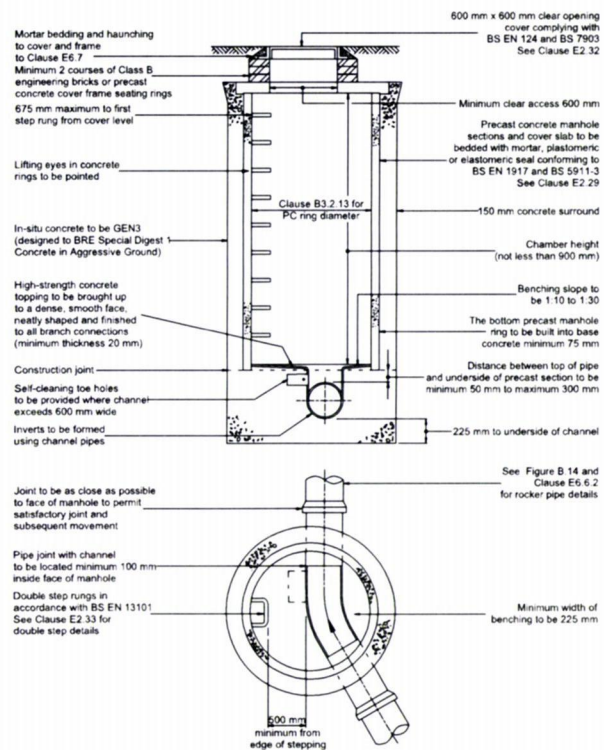
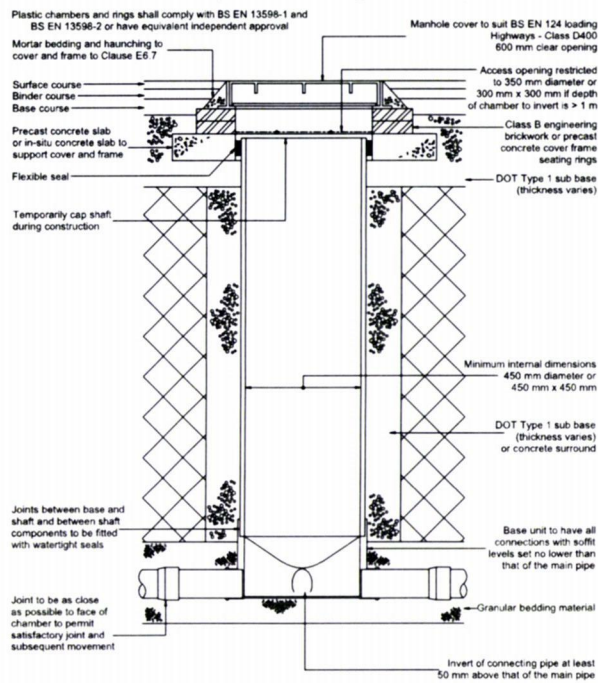


- GENERAL NOTES:**
1. All dimensions to be checked on site. All details and dimensions relating to sub-Contractors work must be checked and agreed between the sub-Contractor or supplier and the general Contractor.
 2. This drawing is to be read in conjunction with all relevant Architect's and Engineer's drawings and specification.
 3. The main Contractor is responsible for ensuring the stability of the structure whilst the works are in progress.
 4. Any information given regarding existing underground services is given in good faith after consultation with the relevant authority. No liability is accepted by the Consultant and the main Contractor is responsible for obtaining and checking all information and taking due care and attention whilst undertaking the works.
- DRAINAGE NOTES:**
1. All adoptable pipes, bends and junctions shall be vitrified clay in accordance with the current version of BS EN 295-1, with flexible joints and landmark corded.
 2. All adoptable sewers shall be in strict accordance with the SSG Appendix C - Design and Construction Guidance. Unless otherwise stated adoptable sewers shall be 150mm diameter and shall be laid in a class S bedding. Where the depth to soffit is less than 1.2m under a public highway or 0.9m elsewhere the pipe shall be laid with a class Z bedding.
 3. All private building drainage shall be constructed in strict accordance with the current version of BS EN 752:2017. Unless otherwise specified building drainage shall be 100mm diameter and shall be laid at a minimum gradient of 1 in 40 for four drains and 1 in 80 for surface water drains. All building drains shall be laid in class B bedding unless otherwise specified.
 4. Where a pipe is within 1m of a foundation the trench shall be filled with class GEN 3 concrete up to the lowest level of the foundation. Where the trench is further than 1m from the foundation, the trench shall be filled with class GEN 3 concrete to a level below the lowest level for the foundation equal to the distance from the foundation less 150mm. In both cases the pipe shall be bedded and surrounded in 150mm thick class GEN 3 concrete.
 5. Where pipes, external to the structures, have a depth to soffit from ground level of less than 450mm they shall have a class GEN 3 concrete encasement (150mm thick). In all other cases the pipes shall be bedded and surrounded with 100mm thick granular material.
 6. In any circumstances where pipes are bedded and surrounded in concrete flexible joints should be provided. Compressible boards (fibreglass or polystyrene) shall be provided at a maximum of 8m centres (conforming with pipe joints). The boards shall be pre-cut to pipe diameter and to a height and width equal to the concrete cross section. A board thickness of 18mm for pipes up to 450mm nominal diameter and 35mm for pipes over 450mm nominal diameter.
 7. All sips shall have rodding access plates fitted at their bases (ground level).
 8. Where existing pipes are to be abandoned they shall be dug out together with any abandoned manholes.
 9. Any discrepancy between the drawing and site should be reported immediately to the Engineer.
 10. All manhole and chamber sizes are given as a minimum to meet the SSG Appendix C-Design and Construction Guidance.

**FIGURE B.12
TYPICAL MANHOLE DETAIL - TYPE 2**
Maximum depth from cover level to soffit of pipe 3.0 m

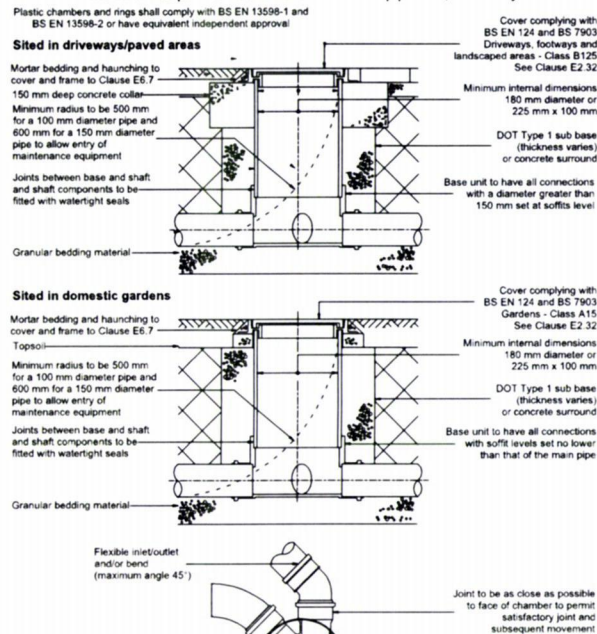


**FIGURE B.16
TYPICAL INSPECTION CHAMBER DETAIL - TYPE 3 (Flexible material detail)**
Maximum depth from cover level to soffit of pipe in areas subject to vehicle loading 3 m, non-entry

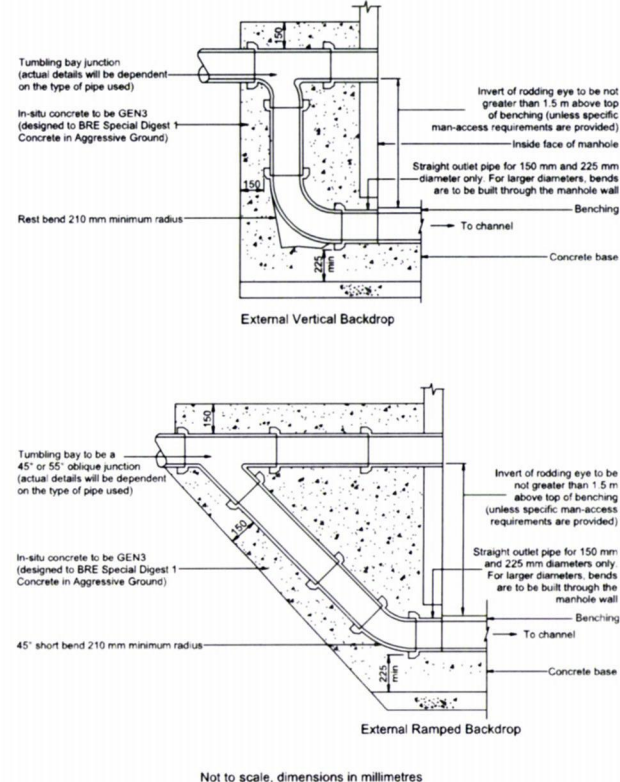


Note: Where the access chamber is in the highway the Highway Authority can have specific requirements

**FIGURE B.21
TYPICAL INSPECTION CHAMBER DETAIL - TYPE 4 (Flexible material detail)**
Maximum depth from cover level to soffit of pipe 2 m, non-entry



Note: Where the access chamber is in the highway the Highway Authority can have specific requirements



Channel drains shall be ACO Multidrain channels M1000 0.0 or 20.0 as supplied by ACO Technologies plc or similar approved. Grating to be laid 3mm below finished level. See Drainage GA locations.

ACO CHANNEL DRAIN DETAIL (Scale 1:20)

ACO UNIVERSAL SUMP DETAIL (Scale 1:20)

150mm minimum Class GEN1 concrete bed and surround or as specified by channel drain supplier.

Grating as adjacent channel

150mm minimum Class GEN1 concrete bed and surround or as specified by channel drain supplier.

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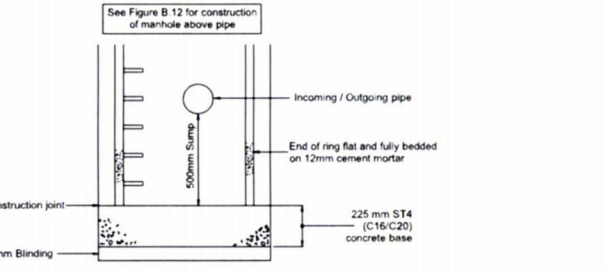
Grating as adjacent channel

150mm minimum Class GEN1 concrete bed and surround or as specified by channel drain supplier.

Grating as adjacent channel

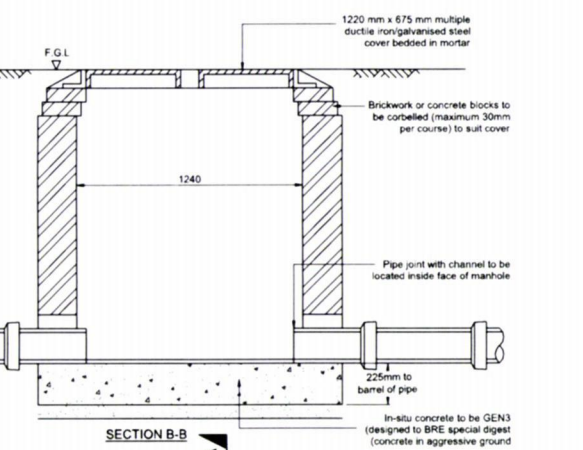
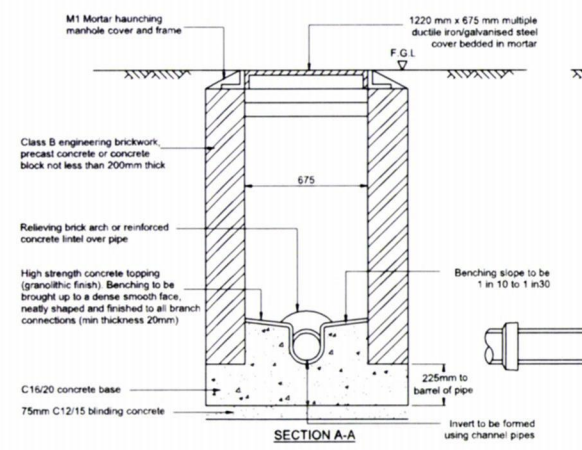
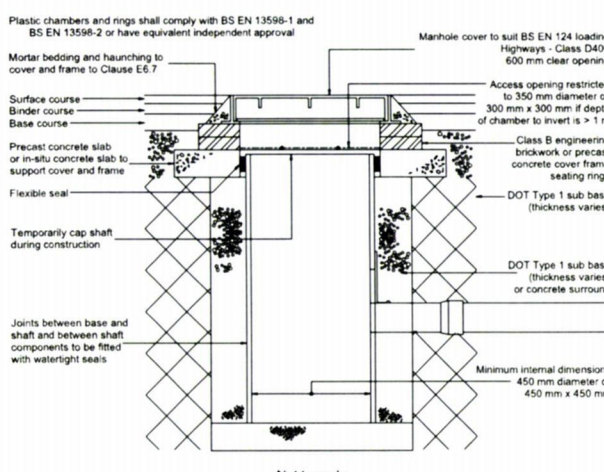
150mm minimum Class GEN1 concrete bed and surround or as specified by channel drain supplier.

Grating as adjacent channel



**CATCHPIT MANHOLE
TYPICAL MANHOLE DETAIL - BASED ON TYPE 2**
Maximum depth from cover level to soffit of pipe 3.0 m

**CATCHPIT INSPECTION CHAMBER
500mm SUMP**
(Scale 1:20)

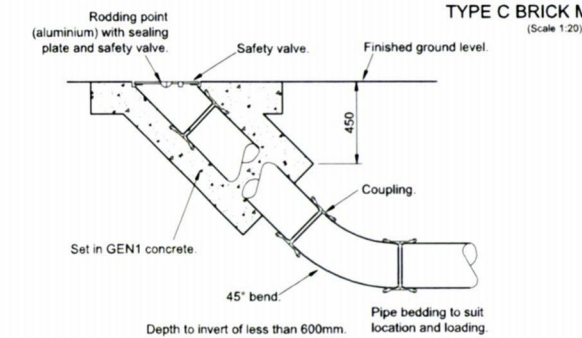


Internal dimensions of manhole normally 1240mm x 675mm but manhole width shall be increased for pipes larger than 225mm diameter to provide 225mm benching each side with the brickwork/masonry units corbelled down to suit cover and frame

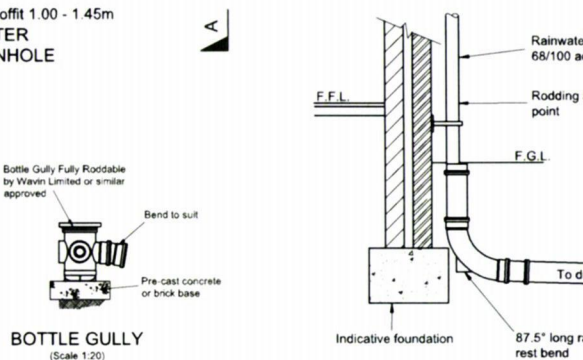
Rocker Pipe Details

Nominal Pipe Diameter (mm)	Maximum Effective Length (m)
150 - 600	0.6
601 - 750	1.0
Over 750	1.25

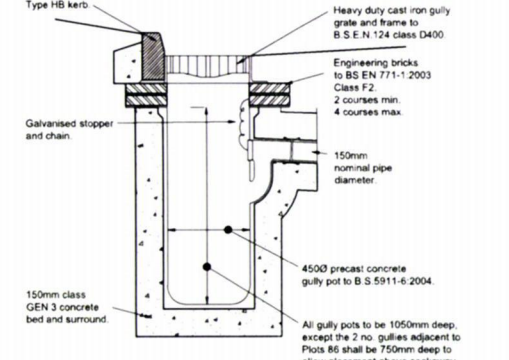
**Inspection Chamber - depth to soffit 1.00 - 1.45m
SOUTHERN WATER
TYPE C BRICK MANHOLE**
(Scale 1:20)



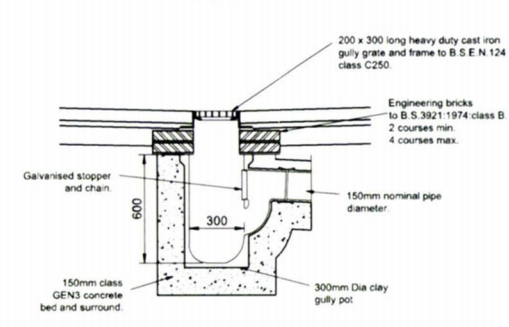
DETAIL OF RODDING EYE
(Scale 1:25)



TYPICAL RAINWATER PIPE DETAIL
(Scale 1:25)



TYPICAL ROAD GULLY
(Scale 1:20)



YARD GULLY
(Scale 1:20)

HAMANT BOROUGH COUNCIL
19 OCT 2021
RECEIVED

All Below Ground Drainage to be Twin Walled PVC-U unless noted otherwise

B	27.09.21	PJR	Minor amendments	SB
A	14.09.21	PJR	Issued for Tender	SB
REV	DATE	BY	DESCRIPTION	CHK

Issue Status

TENDER

The Civil Engineering Practice
11 Tungsten Building
George Street
Fishergate
Sunderland
BN41 1RA
01273 424424
reception@civil.co.uk
www.civil.co.uk

CLIENT	Bargate Homes Limited				
PROJECT	Norton Heights Phase 2 Lovedean Lane, Horndean				
TITLE					
Construction Details Sheet 1 of 3					
DRAWN		DATE		PROJECT NO	
PR		Jan 2021		23246	
ENGINEER		CHECKED		DWG No	
SB		SB		REV	
TOTAL				501 B	
Vares @ A1					