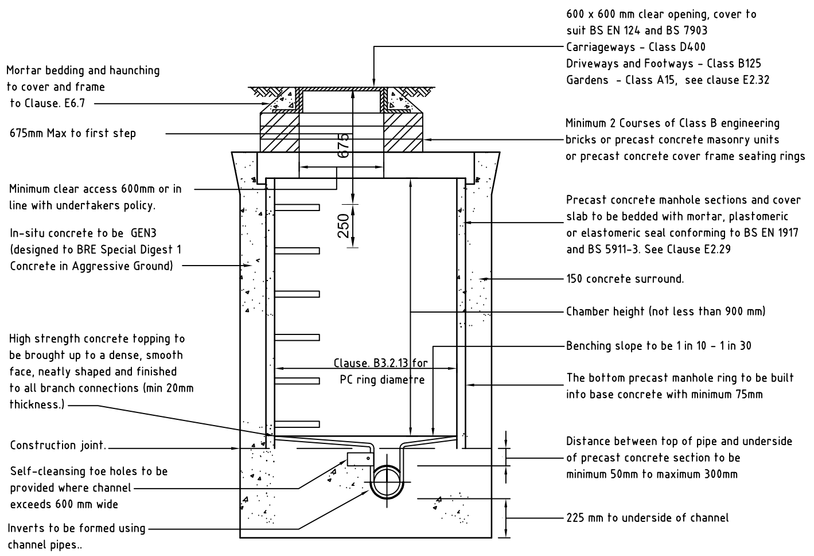
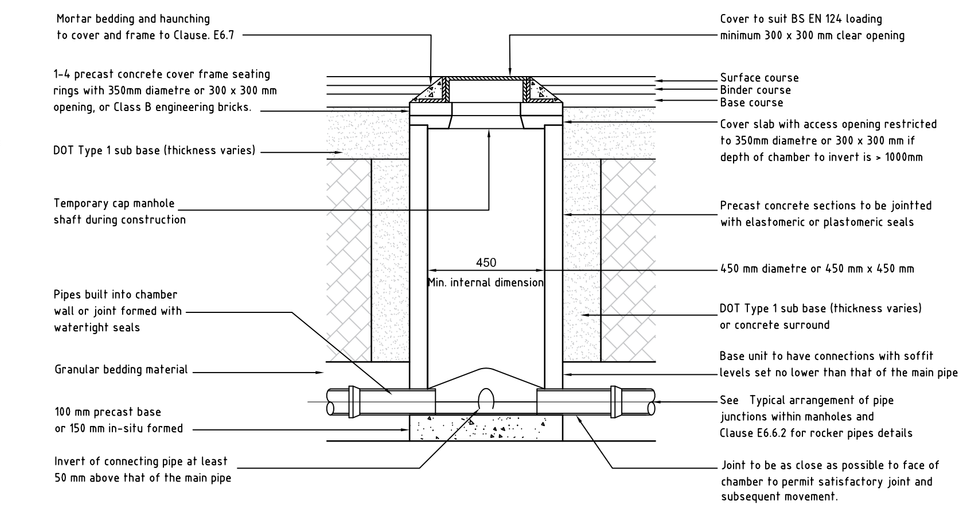


TYPICAL MANHOLE DETAIL-TYPE 2

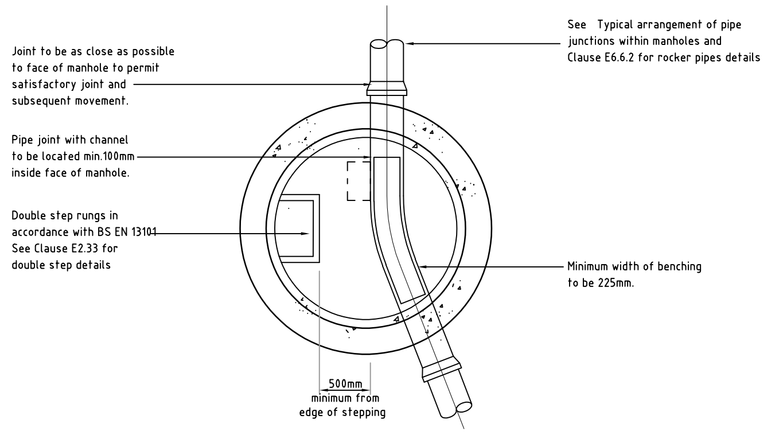
(MAX DEPTH FROM C.L. TO SOFFIT OF PIPE 3000MM)



TYPICAL INSPECTION CHAMBER DETAIL-TYPE 3

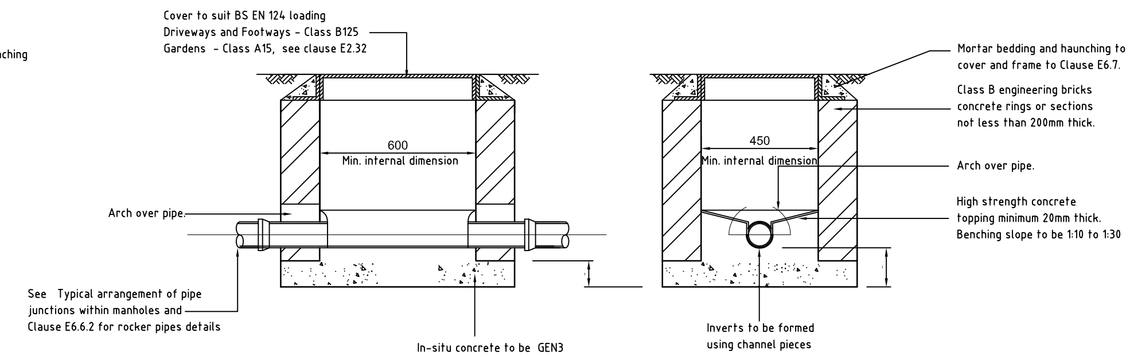
(MAX DEPTH FROM C.L. TO SOFFIT OF PIPE IN AREAS SUBJECT TO VEHICLE LOADING 3000MM, NON-ENTRY

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



ADOPTABLE DRAINAGE INSPECTION CHAMBERS / MANHOLES

1:25



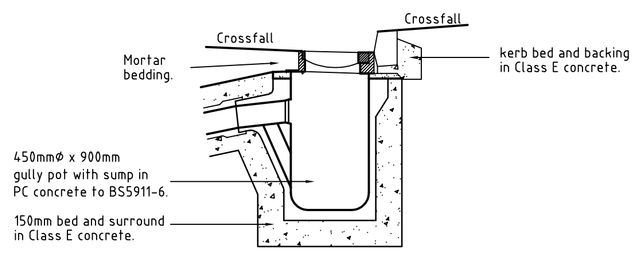
INSPECTION CHAMBER DETAIL - TYPE 4

(MAX DEPTH FROM C.L. TO SOFFIT OF PIPE 1m, no entry)

NOTE:

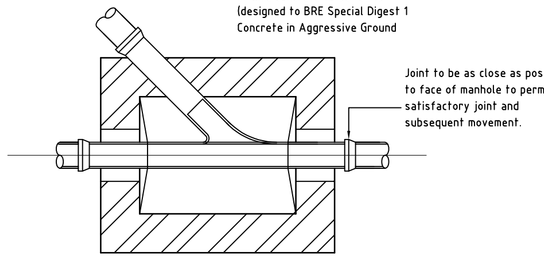
Internal dimensions of manhole with minimum internal dimensions 450x600mm but manhole width should be increased for pipes larger than 150mm dia. to give 150mm benching each side with the brickwork/masonry units corbelled down to suit cover.

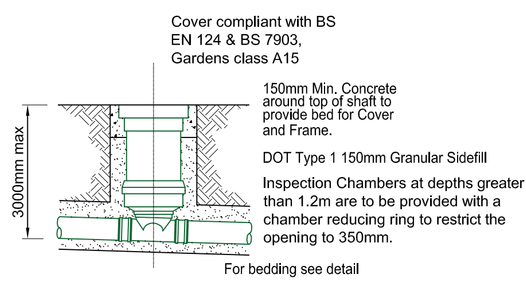
The use of precast rectangular concrete manhole units with 150mm grade GEN3 concrete surround (designed to BRE Special Digest 1 Concrete in Aggressive Ground) is permitted.



ACCESS ROAD CONCRETE GULLY DETAIL

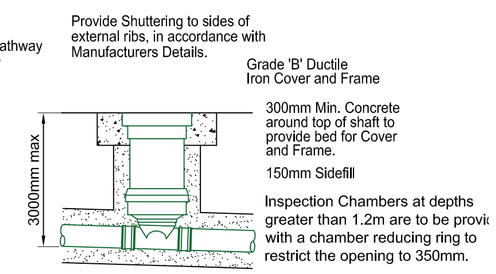
Scale 1:25





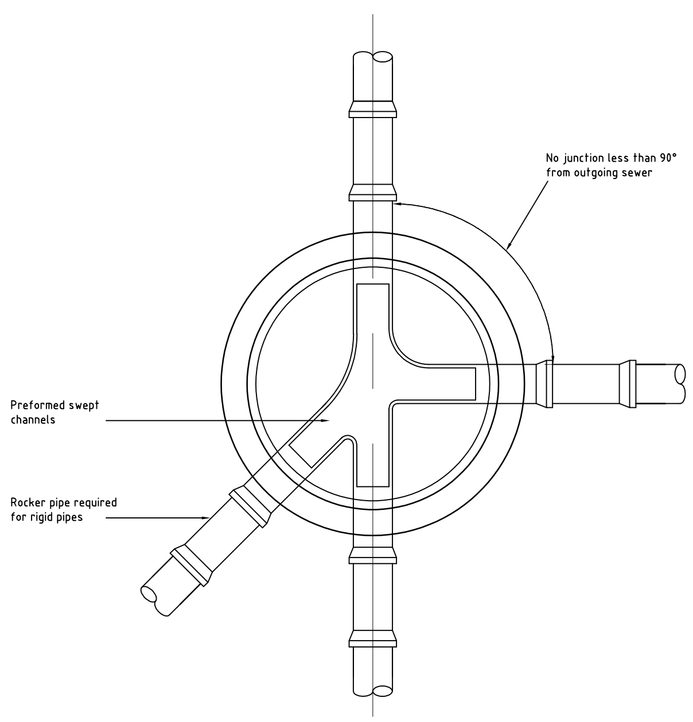
450mmØ INSPECTION CHAMBER GRADE 'A' NON-LOAD BEARING INSTALLATION

1:20



450mmØ INSPECTION CHAMBER GRADE 'B' LOAD BEARING INSTALLATION

1:20



TYPICAL ARRANGEMENT FOR PIPE JUNCTIONS WITHIN MANHOLES

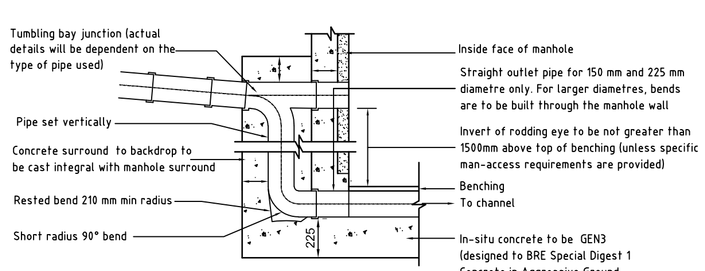
Alternative manhole base layouts to Figure B.20

Scale 1:25

Rigid pipes built into manhole should have a flexible joint as close as feasible to the external face of the structure and the length of the next rocker pipe should be as shown

NOMINAL DIAmetre (MM)	MAXIMUM EFFECTIVE LENGTH (MM)
150 - 600	600
601 - 750	1000
over 750	1250

All pipes entering the bottom of the manhole to have soffits level.



VERTICAL BACKDROP DETAIL

Scale 1:25

TYPICAL PRECAST CONCRETE CHAMBER SHOWN SIMILAR DETAIL FOR BRICK CONSTRUCTION.

FOUL WATER INSPECTION CHAMBER SCHEDULE

Node ID	CL (m)	Depth (m)	Dia (mm)	MH Type	Connections	IL (m)	Dia (mm)	Link Type
FWMH09	8.575	1.005	1200	Adoptable	1	7.570	150	Circular
					2	7.570	100	Circular
					3	7.570	100	Circular
					0	7.570	150	Circular
FWMH10	8.800	0.905	1200	Adoptable	1	7.895	150	Circular
					2	7.895	100	Circular
					3	7.895	100	Circular
					0	7.895	150	Circular
FWMH11	8.950	1.441	1200	Adoptable	1	7.509	150	Circular
					2	7.509	150	Circular
					3	7.649	100	Circular
					0	7.509	150	Circular
FWMH12	8.920	1.531	1200	Adoptable	1	7.389	150	Circular
					0	7.389	150	Circular
FWMH13	9.175	1.853	1200	Adoptable	1	7.931	100	Circular
					2	7.322	150	Circular
					0	7.322	150	Circular
FWMH14	9.600	2.478	1200	Adoptable	1	7.122	150	Circular
					0	7.122	150	Circular
FWMH15	9.800	2.911	1200	Adoptable	1	6.889	150	Circular
					0	6.889	150	Circular
FWMH16	9.900	3.044	1200	Adoptable	1	6.856	150	Circular
FWIC23	8.450	0.450	750	SD Chamber Outlet-CDR-2 600dia	1	8.000	100	Circular
					0	8.000	150	Circular
FWIC24	8.475	0.683	750	SD Chamber Outlet-CDR-2 600dia	1	7.792	150	Circular
					2	7.792	100	Circular
					0	7.792	150	Circular
FWIC25	8.500	0.796	750	SD Chamber Outlet-CDR-2 600dia	1	7.704	150	Circular
					2	7.704	100	Circular
					0	7.704	150	Circular
FWIC26	8.525	0.886	750	SD Chamber Outlet-CDR-2 600dia	1	7.639	150	Circular
					2	7.639	100	Circular
					0	7.639	150	Circular
FWIC27	8.550	0.820	700	SD Chamber Outlet-CDR-2 600dia	1	7.730	100	Circular
					2	7.730	100	Circular
					0	7.730	100	Circular
FWIC28	8.600	0.793	700	SD Chamber Outlet-CDR-2 600dia	1	7.807	100	Circular
					0	7.807	100	Circular
FWIC29	8.490	0.490	700	SD Chamber Outlet-CDR-2 600dia	1	8.000	100	Circular
					0	8.000	100	Circular
FWIC30	8.720	0.763	750	SD Chamber Outlet-CDR-2 600dia	1	7.957	100	Circular
					2	7.957	100	Circular
					0	7.957	150	Circular
FWIC31	8.900	0.780	700	SD Chamber Outlet-CDR-2 600dia	1	8.120	100	Circular
					2	8.120	100	Circular
					0	8.120	100	Circular
FWIC32	8.850	1.030	750	SD Chamber Outlet-CDR-2 600dia	1	7.820	150	Circular
					2	7.820	100	Circular
					0	7.820	150	Circular
FWIC33	8.900	1.206	750	SD Chamber Outlet-CDR-2 600dia	1	7.694	150	Circular
					2	7.694	100	Circular
					0	7.694	150	Circular
FWIC34	8.900	1.269	750	SD Chamber Outlet-CDR-2 600dia	1	7.631	150	Circular
					2	7.631	100	Circular
					0	7.631	150	Circular
FWIC35	8.900	1.325	750	SD Chamber Outlet-CDR-2 600dia	1	7.575	150	Circular
					2	7.575	100	Circular
					0	7.575	150	Circular
FWIC36	9.100	1.100	700	SD Chamber Outlet-CDR-2 600dia	1	8.410	100	Circular
					0	8.000	100	Circular

NOTES

1. This drawing has been prepared using a Topographical Survey Drawing supplied by the client in AutoCAD format.

2.This drawing is to be read in conjunction with all relevant Engineers' and Architects' drawings and specifications.

3. All dimensions are in millimetres unless noted otherwise. All levels are in metres.

4. This drawing has been prepared from drawings supplied by others, therefore, the contractor must take accurate dimensions on site and be satisfied by all dimensions prior to setting out.

5. Levels indicated 'est' refer to interpolated values which are to be checked.

6. In accordance with The Construction (Design and Management) Regulations 2015 (CDM 2015) the Principle Designer and Contractor are to:
-Notify HSE of works.
-Comply with the requirements of Health and Safety Plan (if applicable)
-Provide risk assessments and method statements for all potential hazards relevant to this project.

7. The main contractor shall be responsible for the setting out and accuracy of all dimensions. The contractor shall be satisfied that the information given is correct and any discrepancies should be noted to the Engineer immediately.

8. DO NOT SCALE. If discrepancy or query arises on dimensions consult Engineer.

9. The Contractor is responsible for specifying product and codes and ordering of drainage materials.

10. Precast concrete manhole units shall comply with the relevant provisions of BS EN 1917 and BS 5911-3.

11. All drainage pipes within development site to be 100mm dia unless shown otherwise.

12. Cover grades are in accordance with BS EN 124, BS 7903 and Highways Agency Guidance Document HA 104/09:
- E600 - Carriageways (other than residential areas)
- D400 - carriageways (including pedestrian streets).
- B125 - driveways, footways and landscaped areas.
- A15 - gardens (inaccessible to vehicles)

13. New adoptable pipework to be vitrified clay type in accordance to BS EN 295-1 and BS 65. Pipes to be constructed to the following specifications. Systems that are resistant to a jetting pressure of 4000psi. Systems that minimise the number of joints in the system, by using 3 metre pipe length. Systems that do not have lip seal joints, hence preventing root ingress.

14. All works must be constructed in accordance with 'Sewers for Adoption V7'.

MANHOLE COVERS TBC BY ROAD ALIGNMENT & EXTERNAL WORKS LEVELS

DO NOT SCALE THIS DRAWING

Date	By	Revision	QA'D	Chk'd	Ref

Status: PRILIMINARY

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Project: 27-29 HORNDEAN ROAD
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Title: INFRASTRUCTURE STANDARD DRAINAGE DETAILS (2/2)

Date	APR 2021	Scale	AS SHOWN @ A1	Drg. No.	
Drawn	HS	Chk'd	TB	QA'D DJB	424991/208P