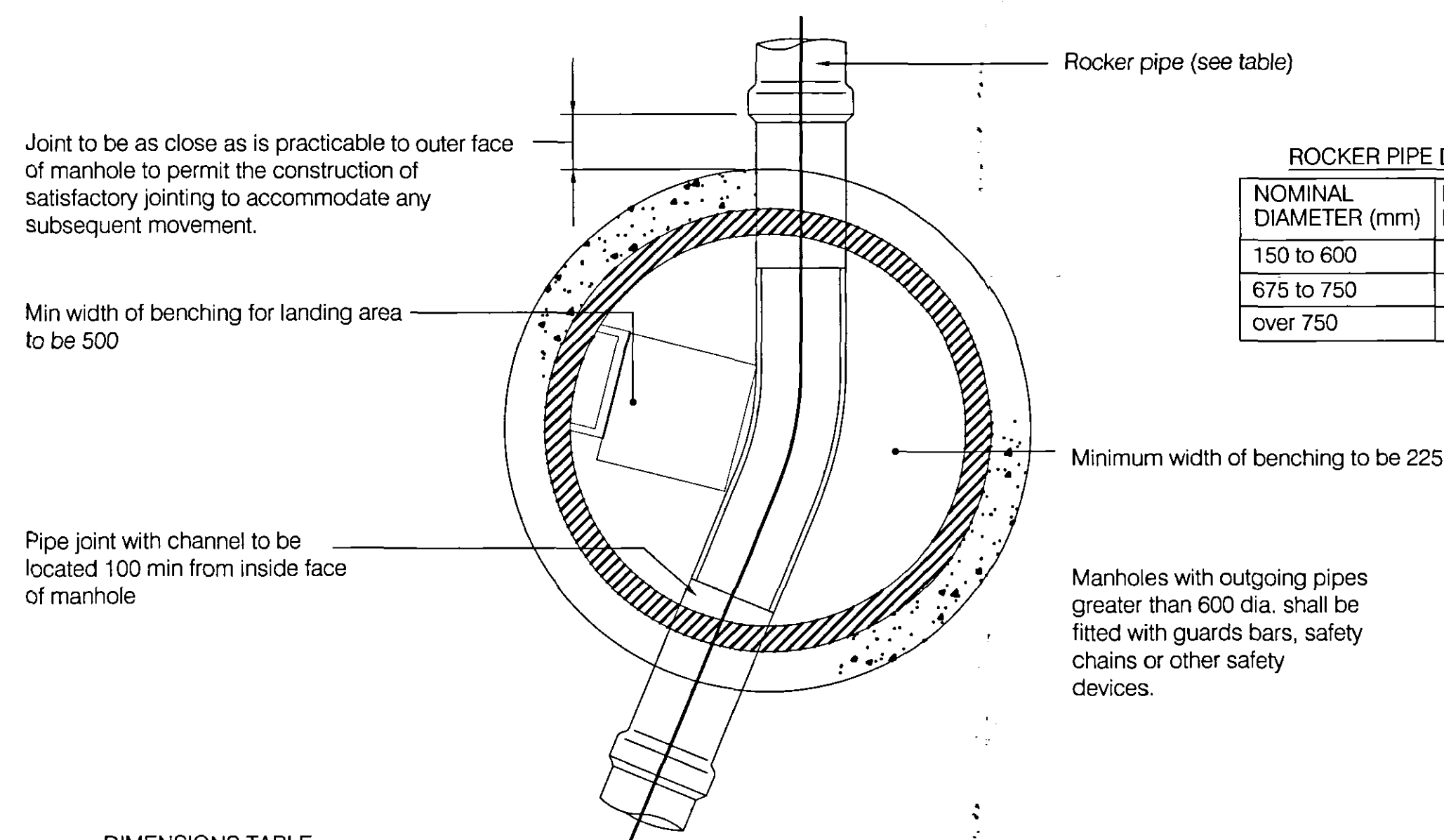
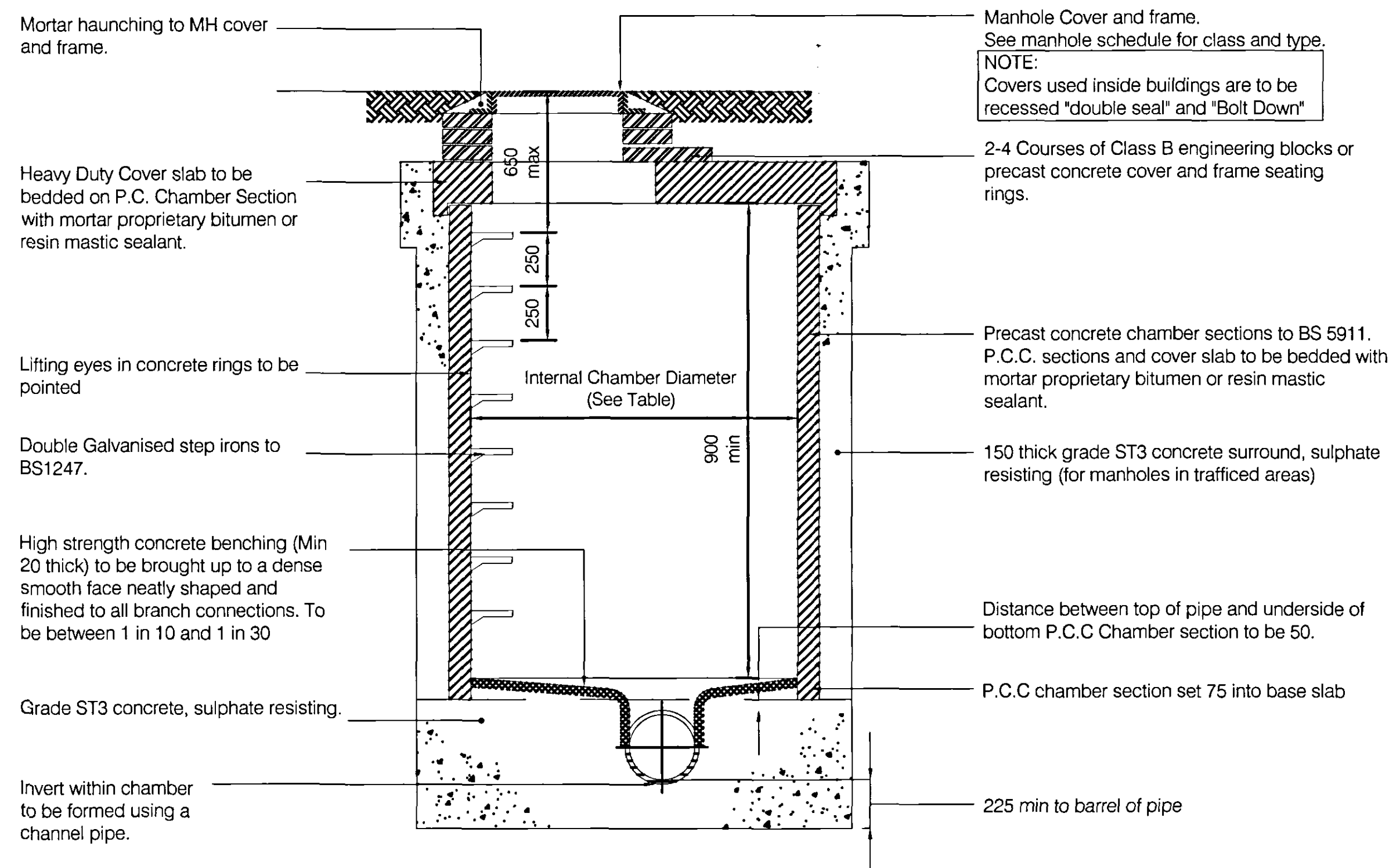




DIMENSIONS TABLE

Type	Size of Largest Pipe (DN)	Circular Diameter	Min clear opening Rectangular	Circular Diameter
< 1.5m to soffit	150	1050	750 x 675	na
	225	1200	1200 x 675	na
	300	1200	1200 x 675	na
> 1.5m to soffit	> 300	Larger of 1800 or (DN+450)	600 x 600	600
	225	1200	600 x 600	600
	300	1200	600 x 600	600
> 1.5m to soffit	375-450	1200	600 x 600	600
	> 450	Larger of 1800 or (DN+775)	600 x 600	600

Notes:

- 1 Larger sizes may be required for manholes on bends or where there are junctions.
- 2 May be reduced to 600 by 600 where required by highway loadings considerations, subject to a safe system of work being specified.
- 3 Not applicable due to working space needed.
- 4 The minimum size of any manhole serving a sewer (i.e any drain serving more than one property) should be 1200 x 675 rectangular or 1200 diameter.

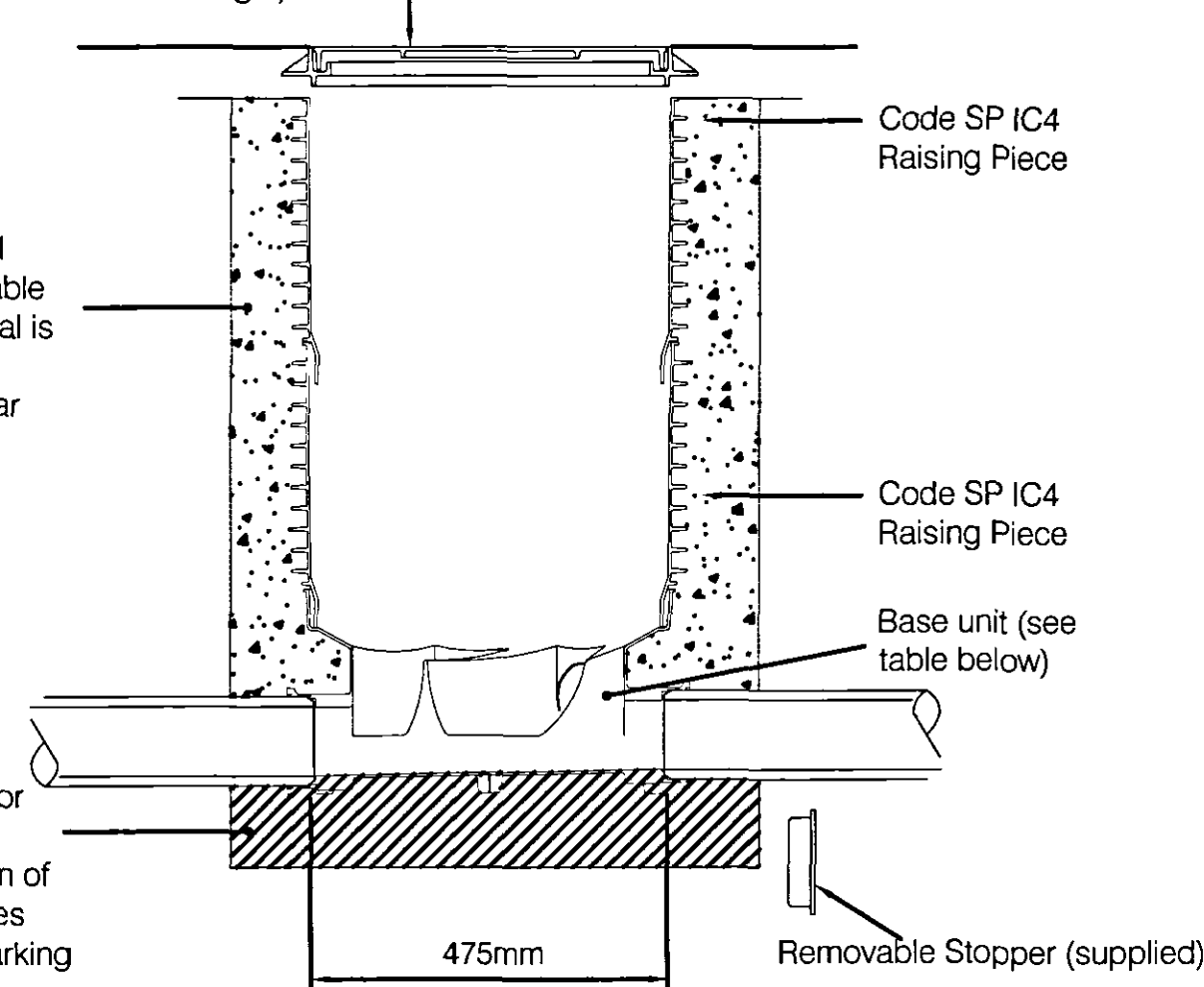
NON ADOPTABLE P.C.C. MANHOLE DETAIL

Scale 1:20

Standard circular ductile iron/GRP cover and frame (Code SPK8)
This type of cover is not suitable where loads will exceed 1 tonne
(For loads exceeding 1 tonne see detail right)

Selected as dug material compacted to form a stable backfill. If as dug material is not suitable, use D.Tp. Specified Type 1 Granular material.

100 of granular material for manholes situated in soft landscaped areas 150mm of ST3 concrete for manholes situated in driveways / parking areas.



Pre-formed benching connection points as per table below

Base unit type	Pipe size	No of Inlets
SP IC1/1	100Ø	5
SP IC1/2	100Ø	3
SP IC2/1	100Ø	5

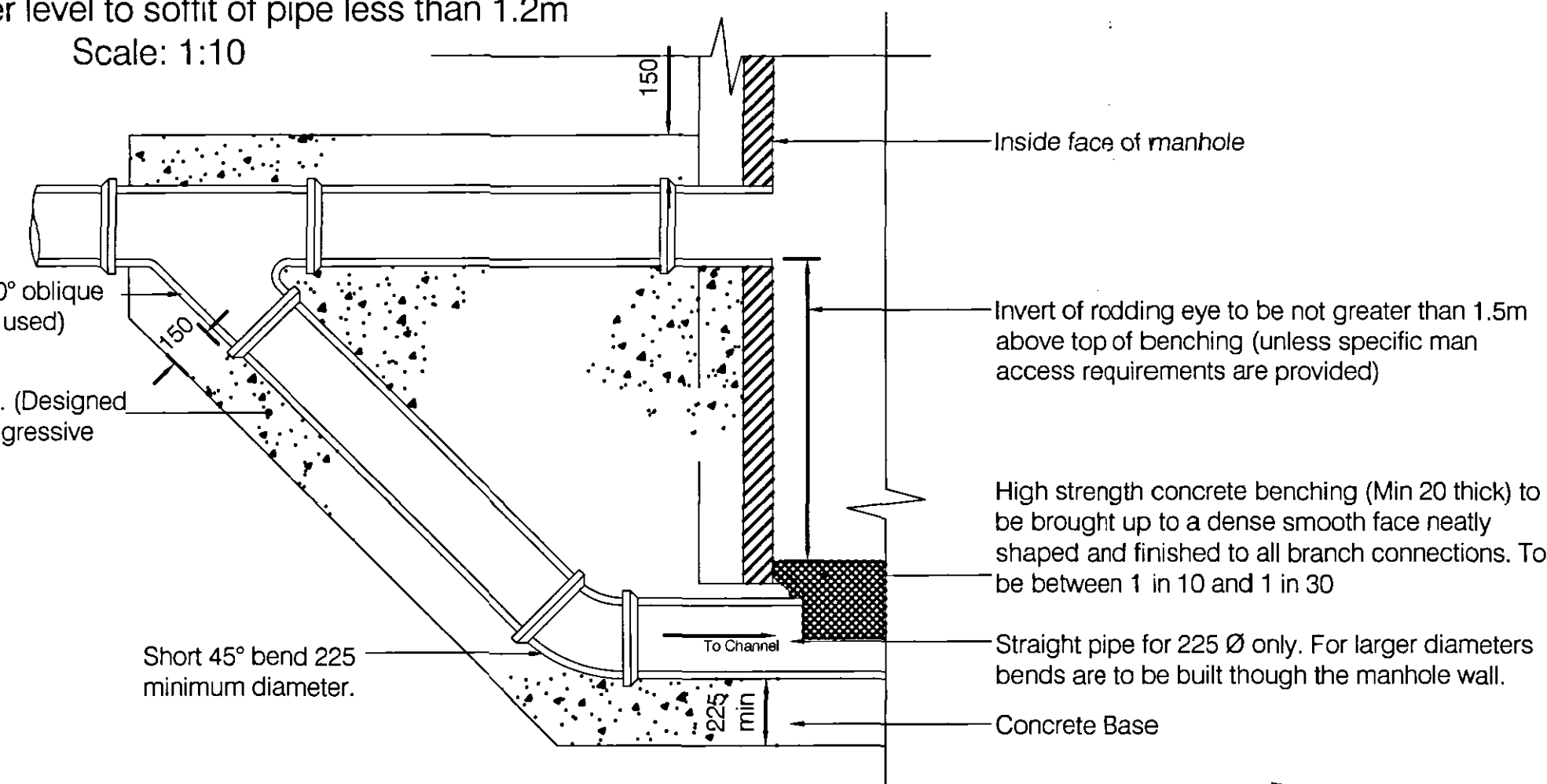
TYPICAL DETAIL FOR POLYPROPYLENE INSPECTION CHAMBER -PPIC

Depth from cover level to soffit of pipe less than 1.2m

Scale: 1:10

Tumbling bay junction to be a 45° or 50° oblique (actual details will depend on pipe type used)

Grade ST3 concrete, Sulphate resisting. (Designed to BRE Special Digest 1 Concrete in Aggressive Ground)



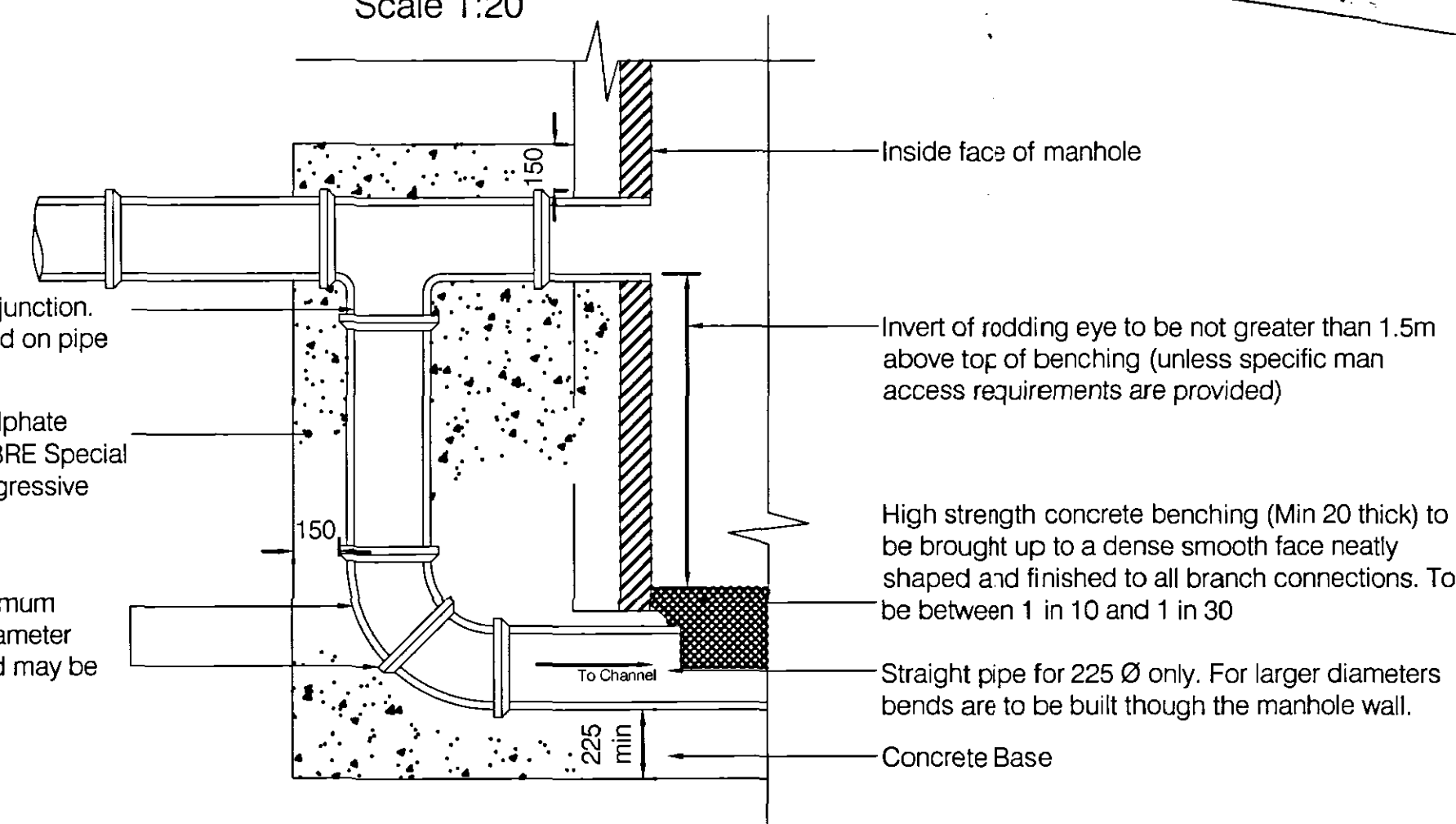
TYPICAL EXTERNAL RAMPED BACKDROP DETAIL

Scale 1:20

Standard Tumbling bay junction. Actual details will depend on pipe type used.

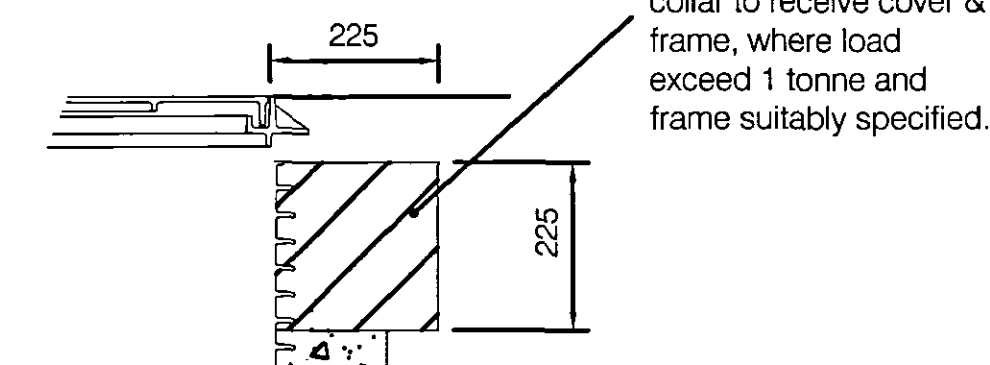
Grade ST3 concrete, Sulphate resisting. (Designed to BRE Special Digest 1 Concrete in Aggressive Ground)

Two 45° bends 225 minimum diameter (where pipe diameter exceeds 300, a 90° bend may be used)



TYPICAL EXTERNAL VERTICAL BACKDROP DETAIL

Scale 1:20



Cover detail where load exceeds 1 tonne

Scale: 1:10

Note

1. Reference numbers refer to supply by Hepworth.

2. Where the depth from cover level to invert level is in excess of 1.2m, then the size of the access cover is restricted to a maximum diameter of 350.

3. This detail is suitable for depths from cover level to invert level up to 1.2m.

Note

Manhole covers and frames to be used within vehicular trafficked areas and car parking are to be heavy-duty ductile iron to BS EN124 Grade D400, except where noted otherwise on the drawings.

Manhole covers and frames to be used outside vehicular trafficked areas are to be medium duty ductile iron to BS EN124 Grade C250, except where noted otherwise on the drawings.

General Notes

1. DO NOT SCALE.

2. This drawing is to be read in conjunction with all other relevant drawings.

3. Should there be any conflict between the details indicated on this drawing and those indicated on other drawings the Engineer should be informed PRIOR to construction on site.

4. Until technical approval has been obtained from the relevant Authority, it should be understood that all drawings issued are Preliminary and NOT for construction. Should the contractor commence site work prior to such approval being given, it is entirely at his own risk.

5. All dimensions are in millimetres unless otherwise stated.

6. Prior to commencing any drainage on site the contractor shall check the inverts & sizes of all existing drainage and inform the engineer if there is any variation with the details indicated on this or any other relevant drawings.

7. All private drainage to be constructed in accordance with Current Building Regulations Part H.

8. All private drains/sewers to be 100mm diameter except where shown otherwise.

9. Refer to Building Regulations Part 'H' for details of pipes penetrating walls and pipe runs near buildings.

10. All rainwater pipes to be complete with rodding access.

11. The positions of soil & vent pipes, rainwater pipes & back inlet gullies on this drawing are indicative only. Please refer to current Architects Plans for exact location.

12. All pipework is to be tested before and after backfilling in accordance with Clause 25 of B.S. 8301 : 1985

13. All workmanship is to be to the most current British Standards.

14. The layout of pipelines, manholes etc. is designed to suit the permanent case. Additional loads over & above those designed for may arise during the construction process. The Contractor shall provide any necessary temporary protection to ensure that pipelines, manholes etc. are not damaged as a result of his method of working.

15. Refer to Manhole schedule for details of manhole types.

A	Updated to 'CONSTRUCTION'	06 Nov 2007	BMM	JR
Rev.	Description	Date	Drawn	Appr.

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Planning Ref: 09 JUL 2008
Ref: 728/08

Drawing Status

CONSTRUCTION

Client

Primary Asset Limited

Project Title

Proposed Medical Centre
Low Gate Road
Gosberton

Drawing Title

Private Drainage Details
Sheet 1 of 2

Drawn By: BMM Checked By: JR Scale: 1:200@A1

Project Engineer: PE Approved By: PE Date: 13/04/07

Drawing Number: 06162/245 Revision: A