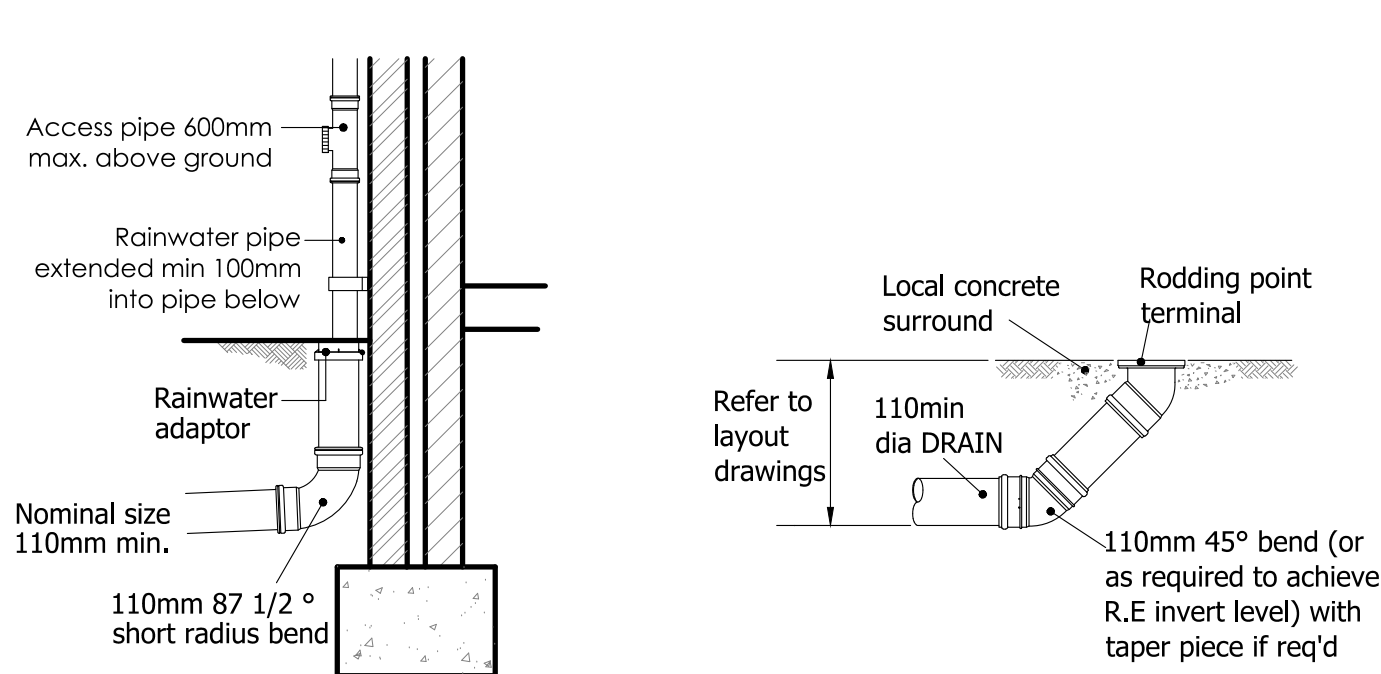
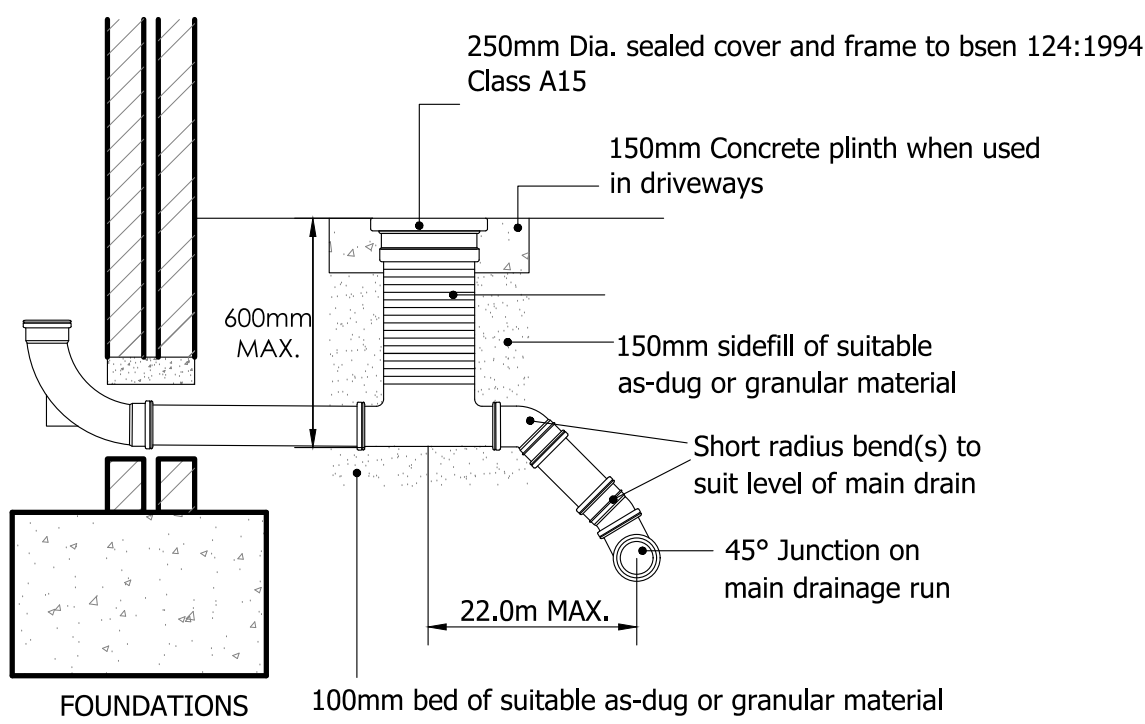


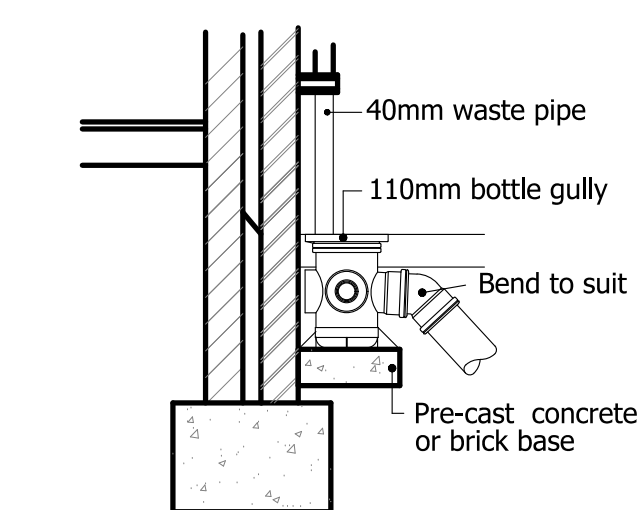


EXTERNAL R.W.P. TO DRAIN

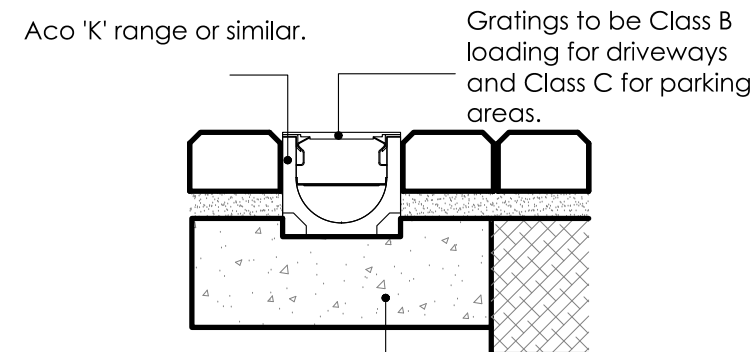
RODDING EYE



FOUNDATIONS



EXTERNAL WASTE PIPE TO BACK INLET GULLY



Grade C25 concrete 100mm min. bed and surround for Class A & B loadings. 150mm min. bed and surround for Class C loadings.

'ACO' DRAINAGE DETAIL

NOTES:
1. Roddable trapped sump units to be positioned at connection to drain, see layouts.
2. Loadings to BSEN 124: 1994

NOTES:
All dimensions must be checked on site and not scaled from this drawing.

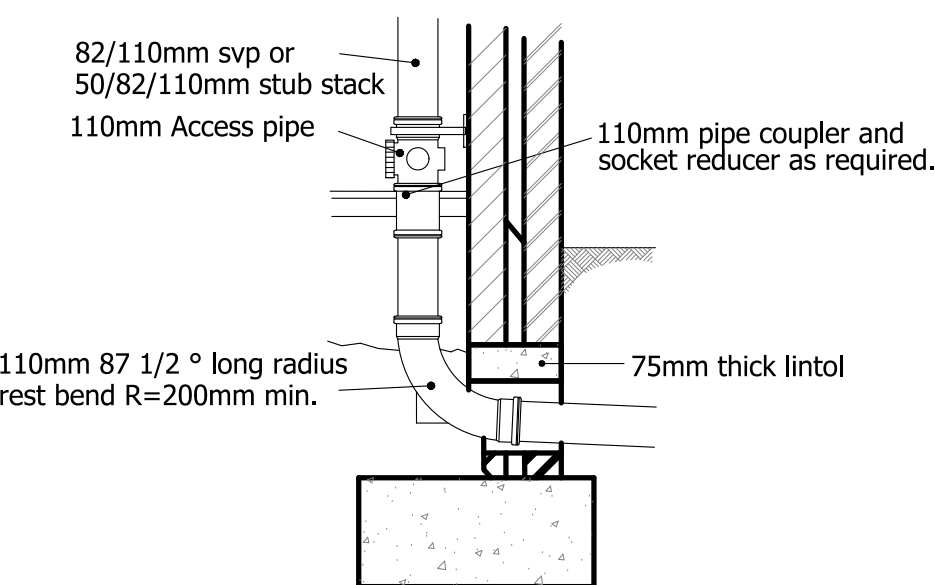
All drainage works to be carried out in accordance with the Building Regulations Document H current at the time of construction.

TYPE	DEPTH TO INVERT FROM COVER LEVEL (m)	INTERNAL SIZES		COVER SIZES	
		RECTANGULAR LENGTH AND WIDTH	CIRCULAR DIAMETER	RECTANGULAR LENGTH AND WIDTH	CIRCULAR DIAMETER
Rodding Eye		As drain but min 100			Same size as pipework (1)
Access Fittings small 150 dia 150x100	0.6 or less, except where situated in a chamber	150x100	150	150x100 (1)	Same size as access fitting
large 225x100		225x100	225	225x100 (1)	
Inspection Chamber Shallow	0.6 or less	225x100	190 (1)	-	190 (1)
Deep	1.2 or less	450x450	450	Min 430x430	430
	>1.2	450x450	450	max 300x300 (3)	Access restricted to max 350 (1)

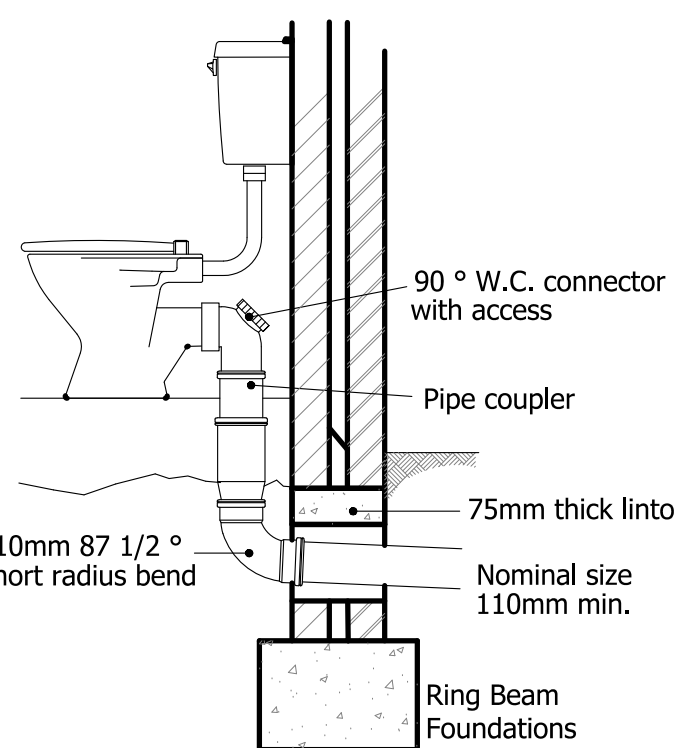
Notes:
(1) The clear opening may be reduced by 20mm in order to provide proper support for the cover and frame.
(2) Drains upto 150mm.
(3) A larger clear opening cover may be used in conjunction with a restricted access. The size is restricted for health and safety reasons to deter entry.

TYPE	SIZE OF LARGEST PIPE (DN)	MIN. INTERNAL DIMENSIONS (1)		MIN. CLEAR OPENING SIZE (1)	
		RECTANGULAR LENGTH AND WIDTH	CIRCULAR DIAMETER	RECTANGULAR LENGTH AND WIDTH	CIRCULAR DIAMETER
MANHOLE <1.5m deep to soffit	<= 150 225 300 >300	750 x 475 (7) 1200 x 675 1200 x 750 1800 x (DN+450)	1000 (7) 1200 1200 The larger of 1800 or (DN+450)	750 x 475 (2) 1200 x 675 (2)	na (3)
>1.5m deep to soffit	<= 225 300 375-450 >450	1200 x 1000 1200 x 1075 1350 x 1225 1800 x (DN+775)	1200 1200 1200 The larger of 1800 or (DN+775)	600 x 600	600
MANHOLE SHAFT (4)	Steps (5) Ladder (5) Winch (6)	1050 x 800 1200 x 800 900 x 800	1050 1200 900	600 x 600	600

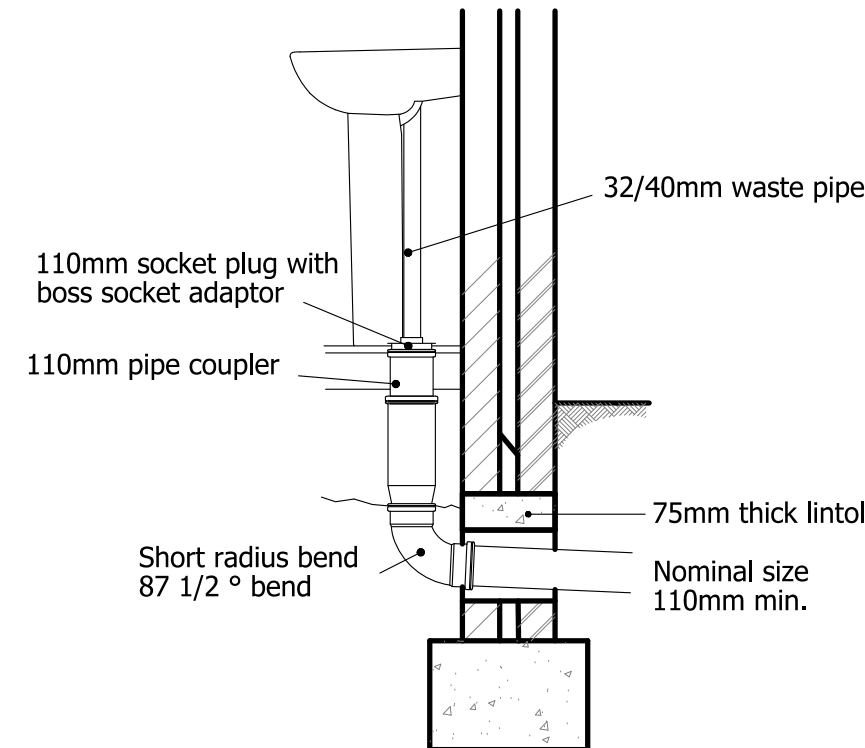
Notes:
(1) Larger sizes may be required for manholes on bends or where there are junctions.
(2) May be reduced to 600 by 600 where required by Highway loading considerations, subject to a safe system of work being specified.
(3) Not applicable due to working space needed.
(4) Minimum height of chamber in shafted manhole 2m from benching to underside of reducing slab.
(5) Min clear space between ladder or steps and the opposite face of the shaft should be approximately 900mm.
(6) Winch only - no steps or ladders, permanent or removable.
(7) The minimum size of any manhole serving a sewer (i.e. any drain serving more than one property) should be 1200mm x 675mm rectangular or 1200mm diameter.



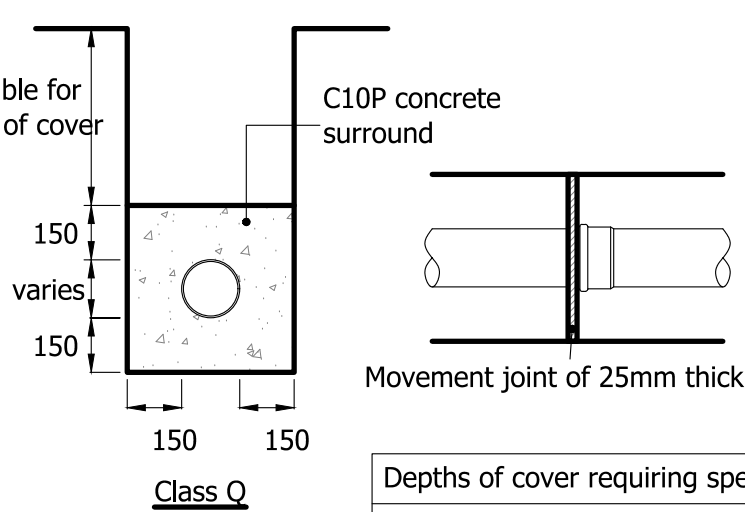
SOIL AND VENT PIPE CONNECTION AND STUB STACK CONNECTION



W.C. DIRECT TO DRAIN



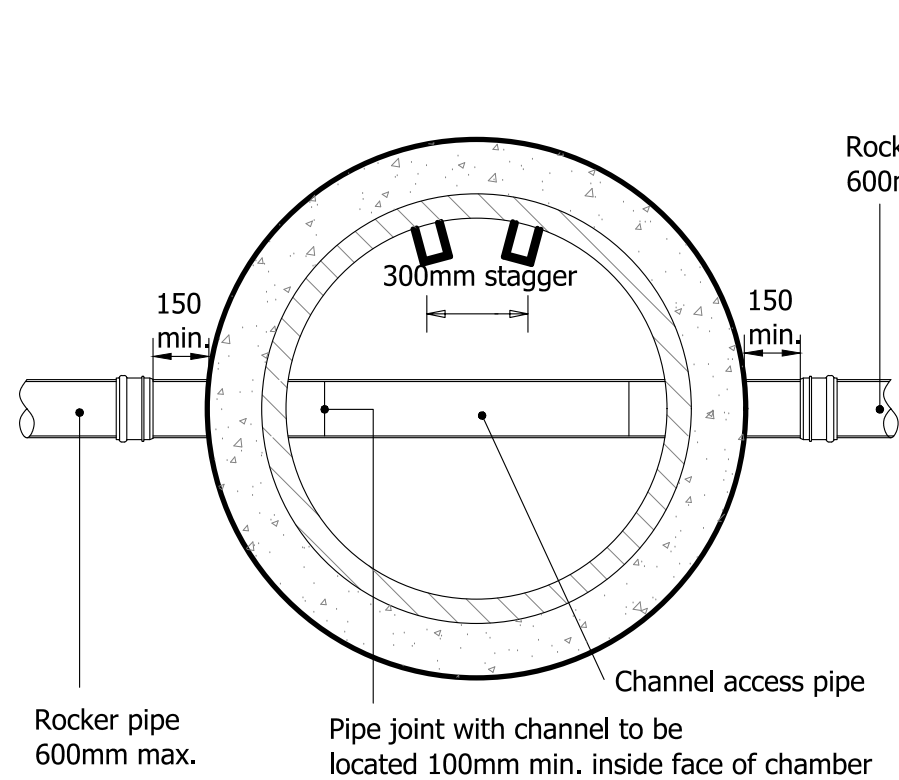
INTERNAL WASTE PIPE CONNECTION



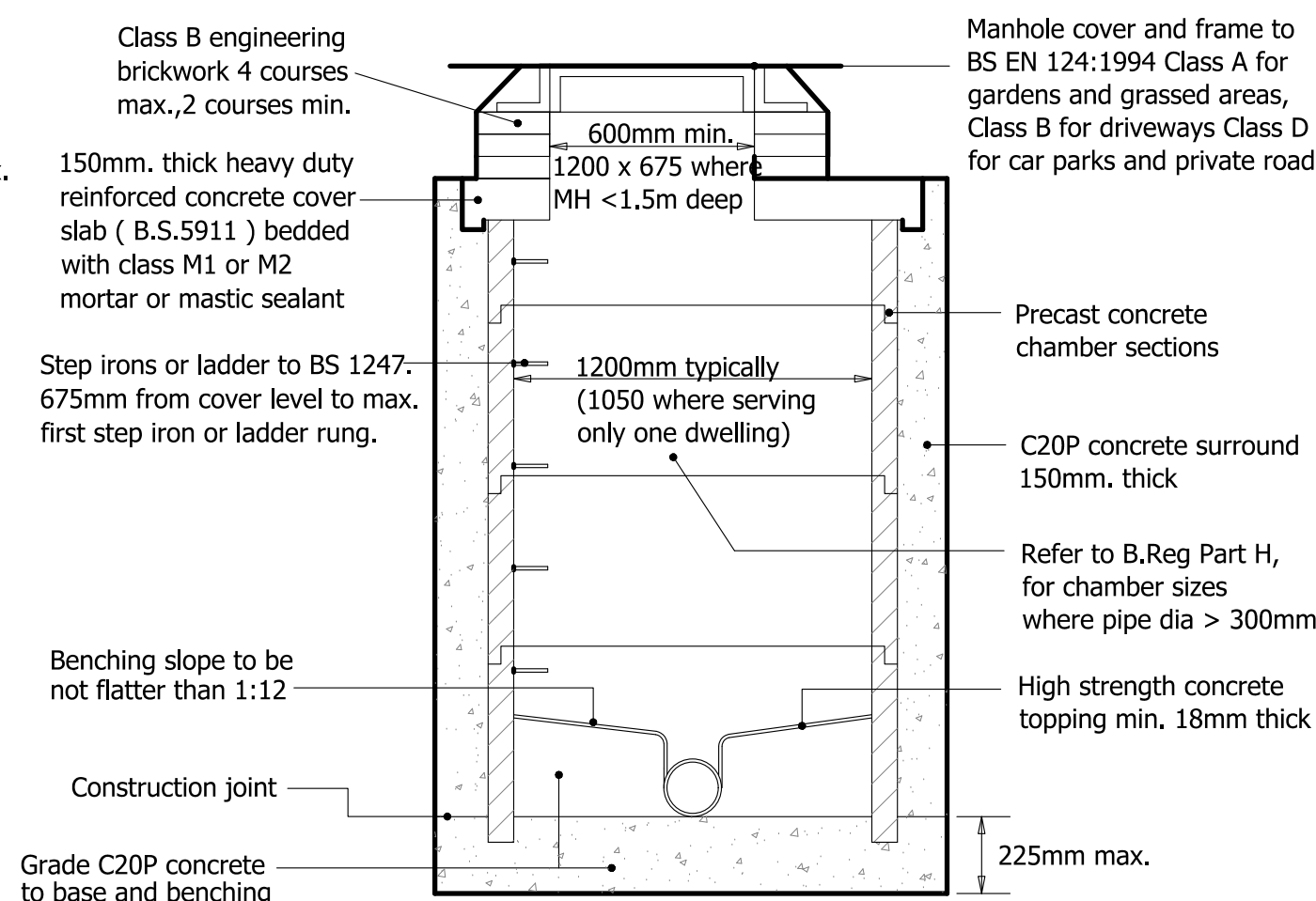
Depths of cover requiring special protection	
Less than 600mm	Gardens and grassed areas
Less than 900mm	Roads, drives & parking areas

SPECIAL PROTECTION-GROUND LOADS (H1. DIAG'S 11 & 12)

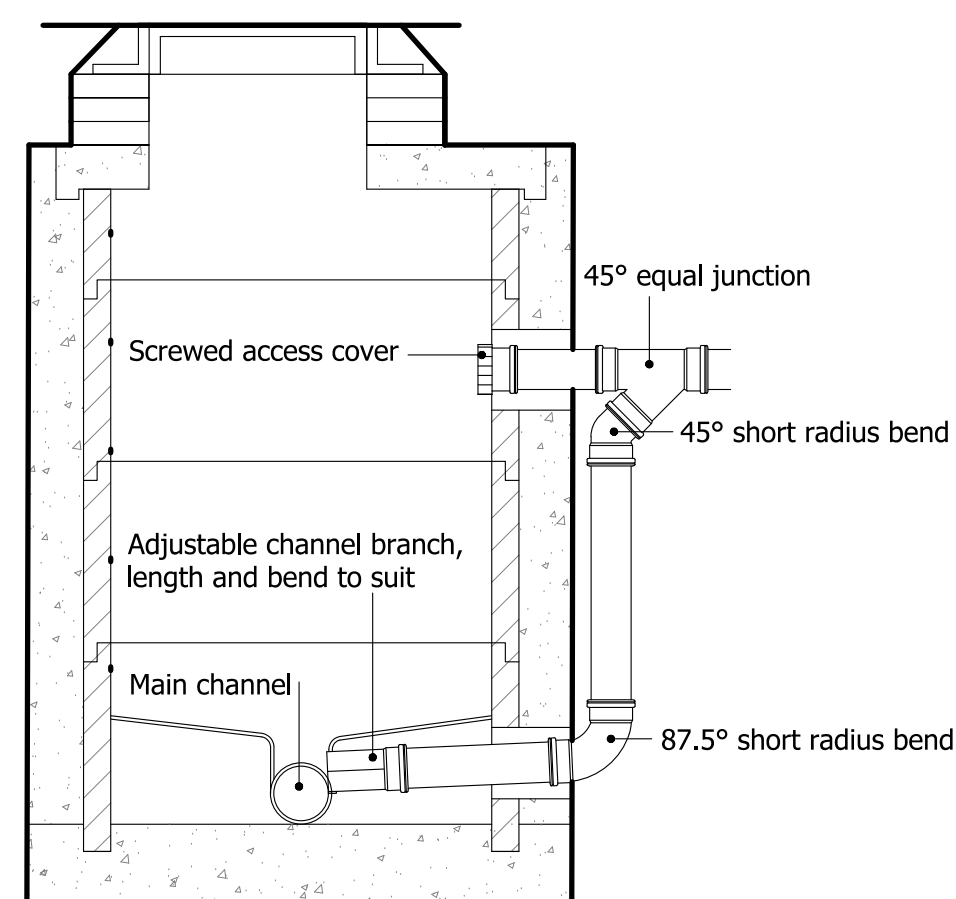
PRELIMINARY DRAWING



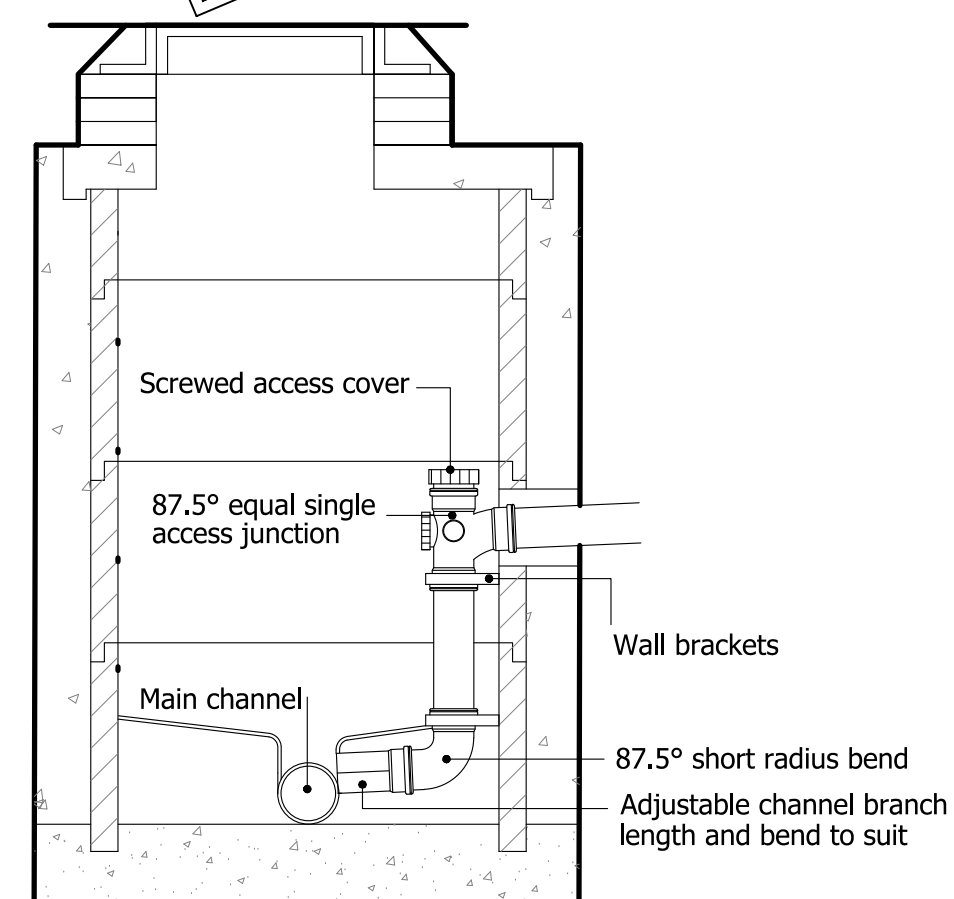
SHALLOW INSPECTION CHAMBER
For use in soft areas & driveways only



P.C.C. MANHOLE OVER 3.0m DEPTH



EXTERNAL BACKDROP

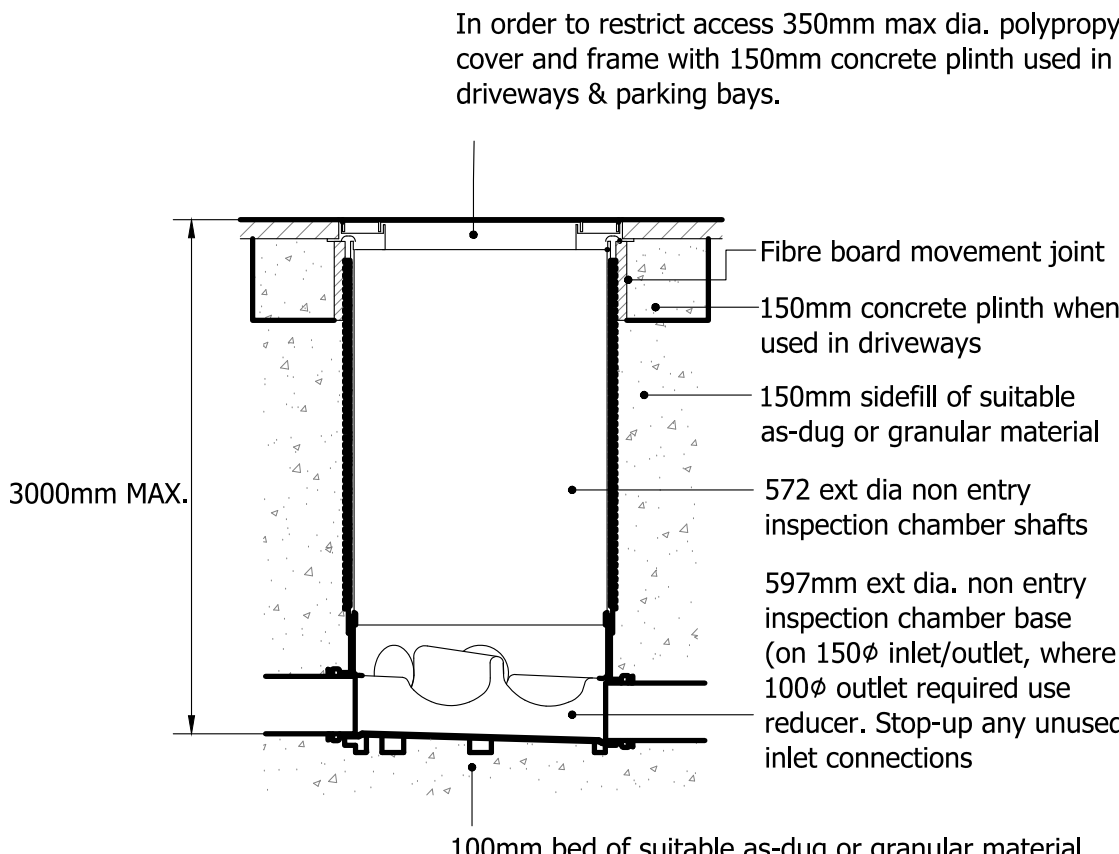


INTERNAL BACKDROP

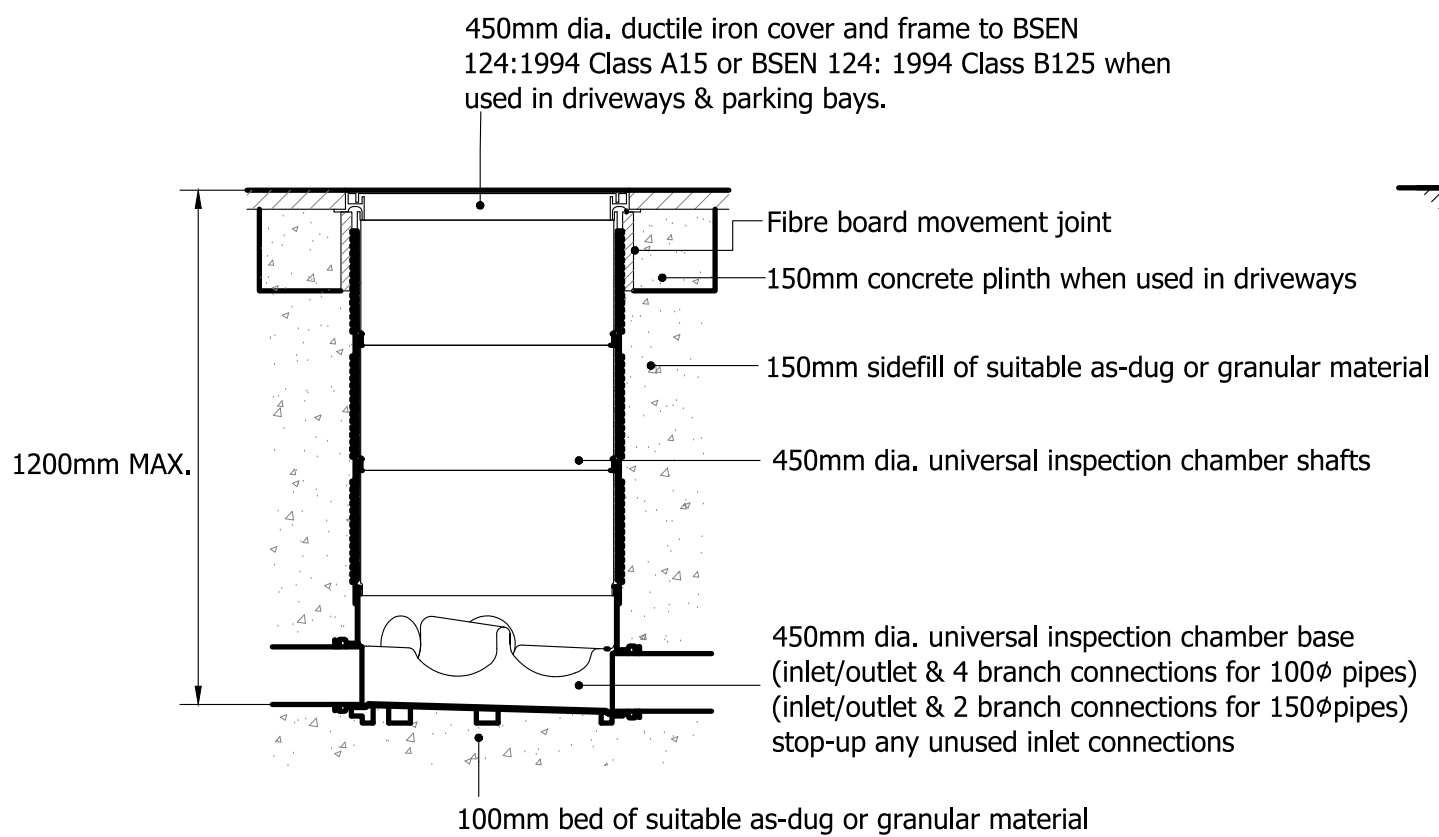
- All private drainage works to be constructed in accordance with the latest edition of the Building Regulations Part H (Drainage & Waste Disposal) and to BSEN752 (Building Drainage).
- All pipes running through walls to have at least 50mm clearance all round and the opening masked with rigid sheet material.

Date	Revisions
© copyright	
STAFFORD I E 10 AXON, COMMERCE ROAD PETERBOROUGH BUSINESS PARK LYNCH WOOD PETERBOROUGH, PE2 6LR TEL: 01733 232368, FAX: 01733 232266, MOBILE: 07710 832745, E-MAIL: mail@Staffordie.co.uk	
Client	
DAVE COOK ENGINEERING QUADRING ROAD, DONINGTON, SPALDING, Lincs, PE11 4TB Tel: 01775 723025 email jon@davecook-eng.co.uk	

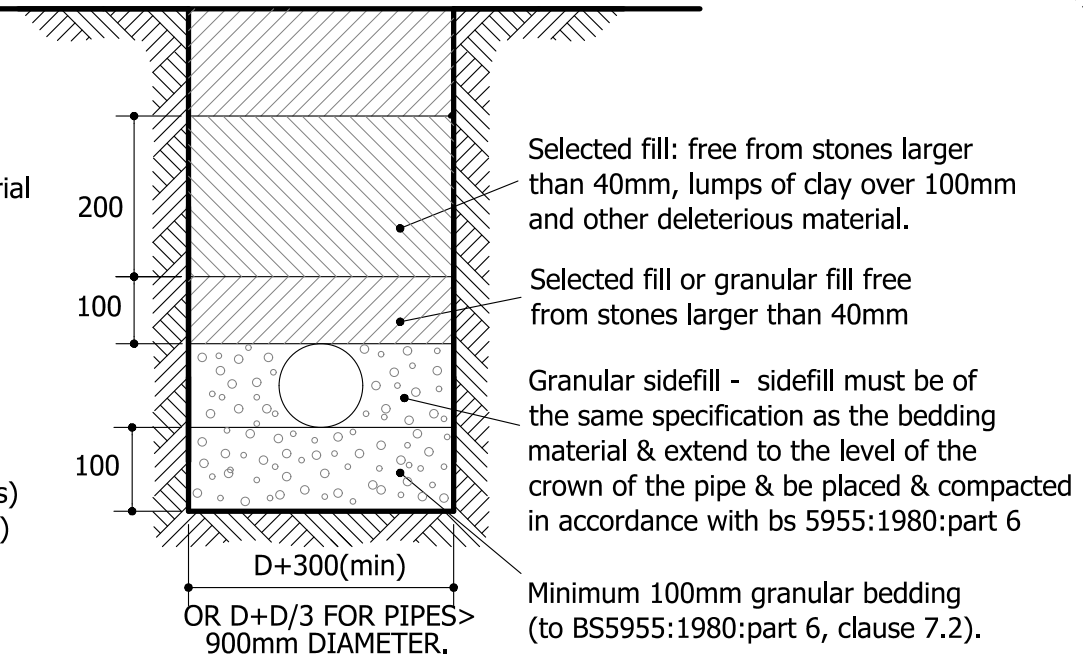
Job Title		
Land Off Quadring Road, Donington, Spalding, PE11 4TB		
Drawing Title		
Construction Details Private Drainage Sheet 1		
Date	Scale	Drawn
FEB 2020	NTS	LCM
Drg.No.		Rev.
8981 -301		-



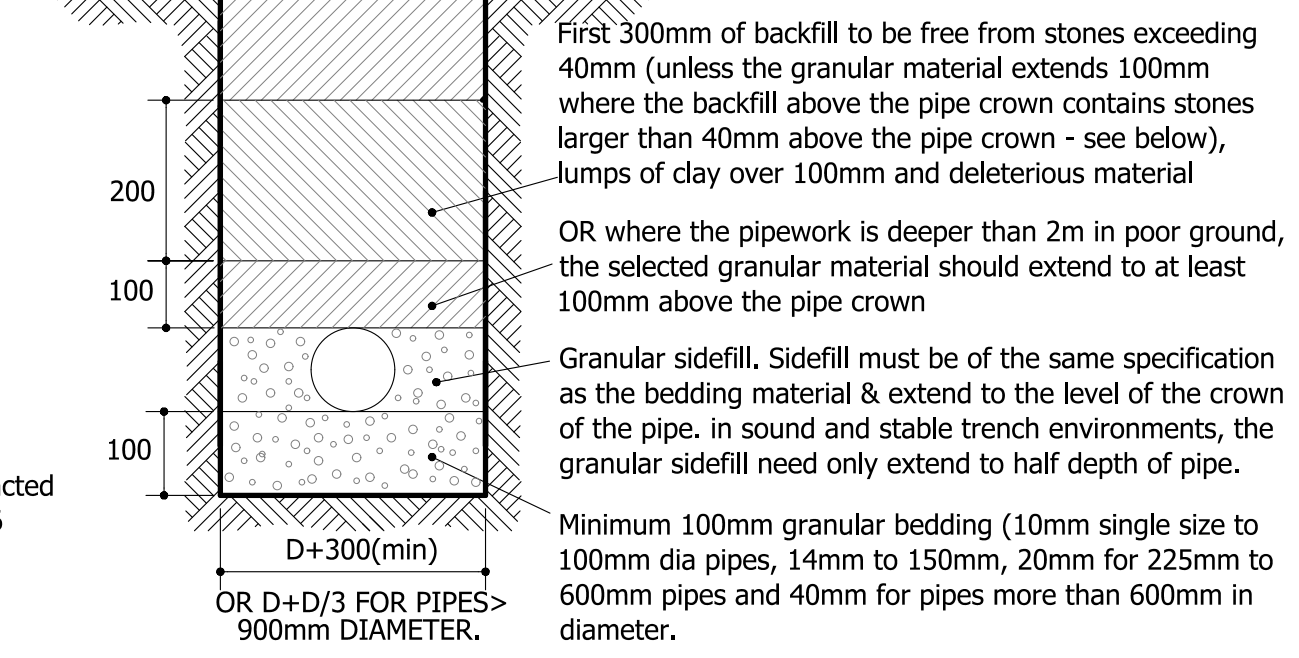
1.2m - 3.0m DEEP NON ENTRY INSPECTION CHAMBER
for use in soft areas, driveways and parking bays only



1.2m MAX. UNIVERSAL INSPECTION CHAMBER
for use in soft areas, driveways and parking bays only



BEDDING DETAIL FOR uPVC PIPES



CLASS B : BEDDING FACTOR 1.9
FOR USE WITH CONCRETE & CLAY PIPES