

This drawing to be read in conjunction with all relevant BCAL, Architects, M & E, Specialist Consultants and Contractors project specific drawings and specifications. Current British Standards apply.

All dimensions are in millimetres. (N.N.O)

All levels are in metres. (N.N.O)

Written dimensions only shall be used.

Do Not Scale.

Any discrepancies shall be brought to the attention of BCAL immediately.

IF IN DOUBT ASK.

NOTES

Refer also to Drawings

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P1	Preliminary Issue	09/01/26	CG	MB
No	Description	Date	By	Chk
Revisions to this Drawing				
Dwn	CG	Date: 27/11/25	Chk:	BK

BCAL

CONSULTING

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Client

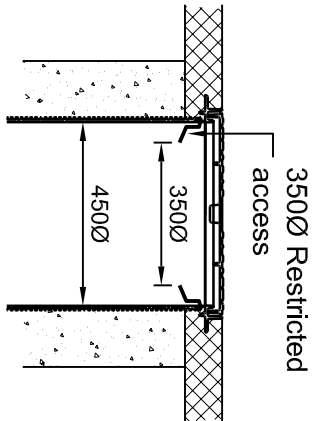
ERI MTP Limited

Project
MIRA North

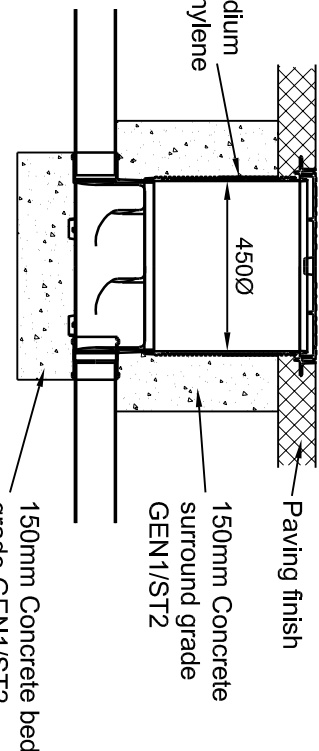
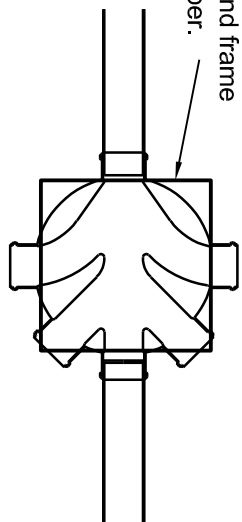
Dwg. Title
Drainage Details Sheet 1

Scales @ A1 Drawing No. Rev
As Indicated 0550 P1

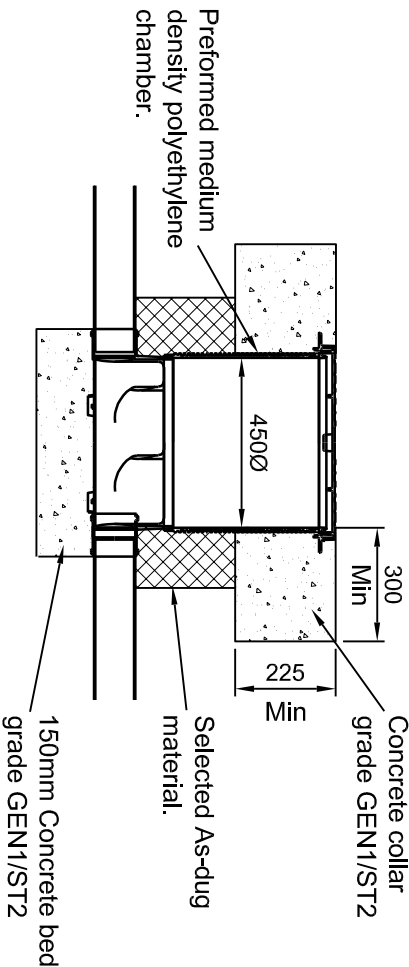
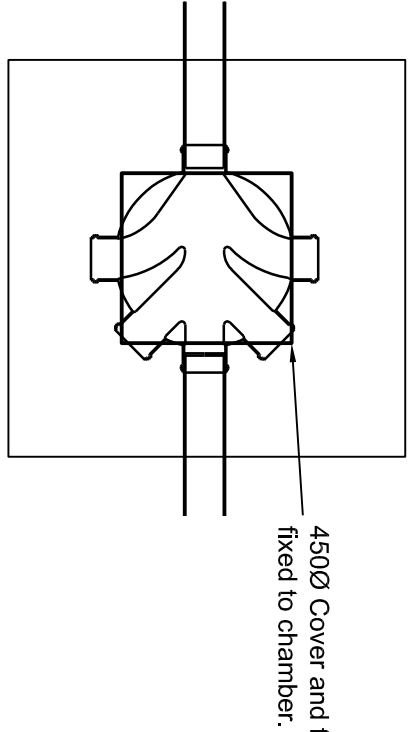
Ref 10627-BCI-XX-XX-DR-C-0550-P1
Status Preliminary



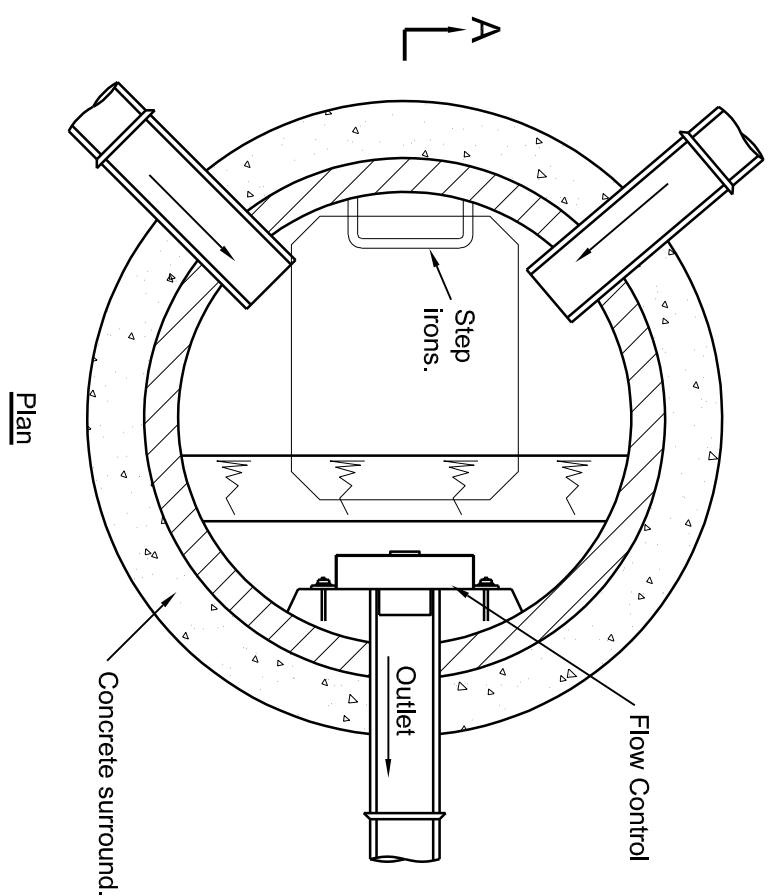
Typical Restricted Access Cover Detail
(to PPIC Chamber)



Typical Inspection Chamber Detail
Type BR9 in Hard Paving areas
(Depth to invert not exceeding 12m)



Typical Inspection Chamber Detail
Type BR1 in Soft Landscape areas
(Depth to invert not exceeding 1.2m)



Flow Control Chamber Notes

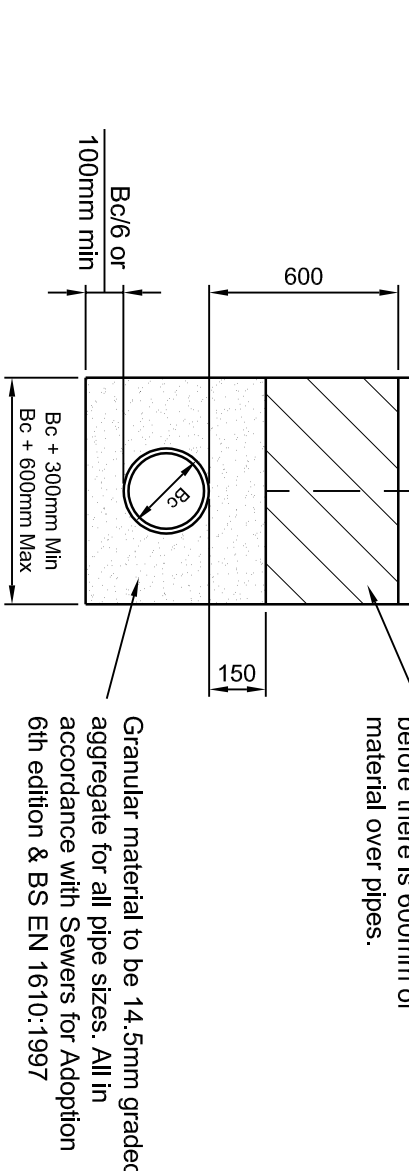
- Refer to drawing 540 for details of the overall drainage system.
- Chamber P6, P7A, P7B, P9, P14W/3, P14 is to contain an approved flow control device to restrict flow. Flows and diameters to vary from chamber to chamber, refer to drawing 540 for specific chamber.
- Flow control device to be installed generally in accordance with manufacturers recommendations.
- Flow Controls to be:
 - ACO Q-Brake Control
 - Hydro-Brake Control
- Mounting block to consist of GEN 3/ST4 concrete secured to the PCC chamber floor by appropriate proprietary ties. Class F2 formwork to all exposed faces, U2 finish to unformed surfaces.

Designated Mix	Standard Mix
Mass Concrete Fill	GEN 0 (7.5/nnm ³)
Blinding	GEN 1 (10.0/nnm ³)
Mass Concrete Foundations	GEN 3 (20.0/nnm ³)
Surrounds to manholes	GEN 3 (20.0/nnm ³)
Concrete Surround to pipes	GEN 3 (20.0/nnm ³)

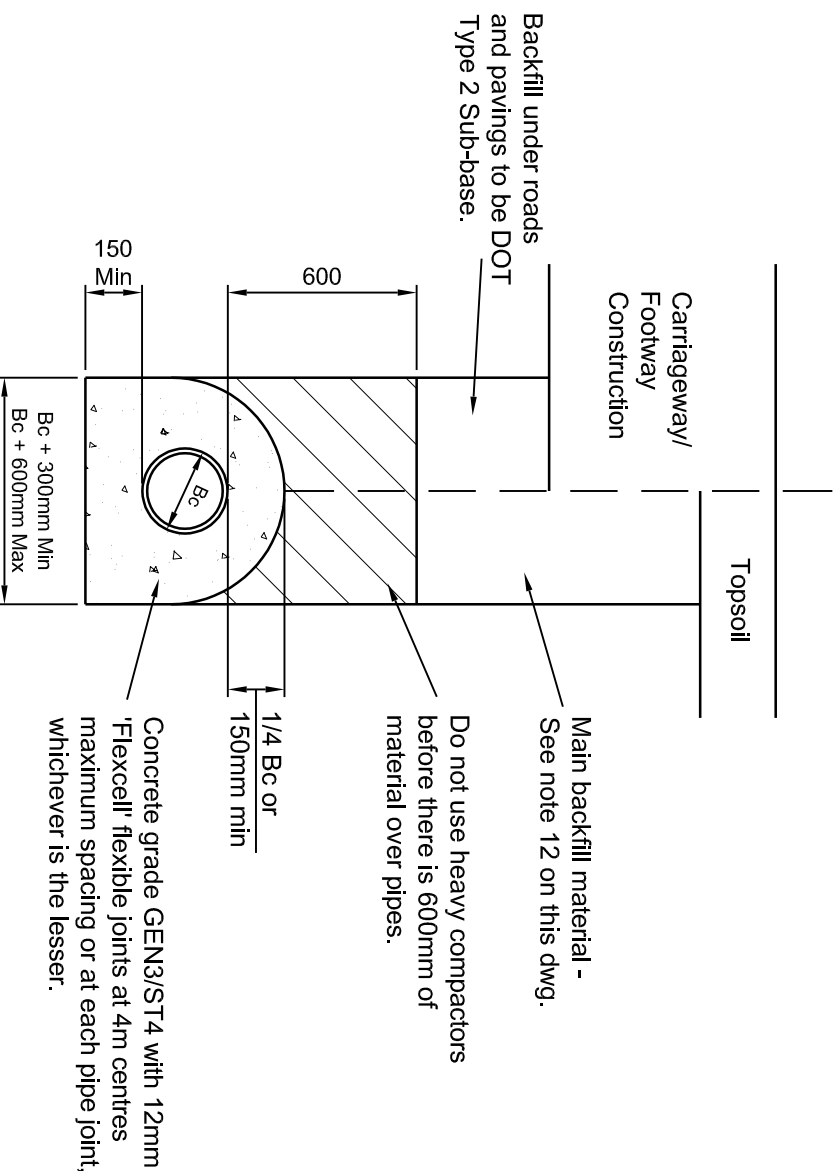
- Selected fill to be uniform, readily compactable material free from tree roots, vegetable matter, building rubbish, frozen soil, lumps of cohesive soil larger than 75mm and stones larger than 37.5mm.
- Pipe bedding and sticfill materials shall be imported granular material. Granular material to be 14.5mm or 20.0mm graded aggregate for all pipe sizes or 40.0mm crushed rock for pipe sizes 250mm and above. All in accordance with Sewers For Adoption 6th edition & BS EN 1610:1997
- All concrete in drainage works to be in accordance with BS 8500-1:2006 designated or standard mixes as follows:-
- Flow Controls to be:
 - ACO Q-Brake Control
 - Hydro-Brake Control
- Mounting block to consist of GEN 3/ST4 concrete secured to the PCC chamber floor by appropriate proprietary ties. Class F2 formwork to all exposed faces, U2 finish to unformed surfaces.



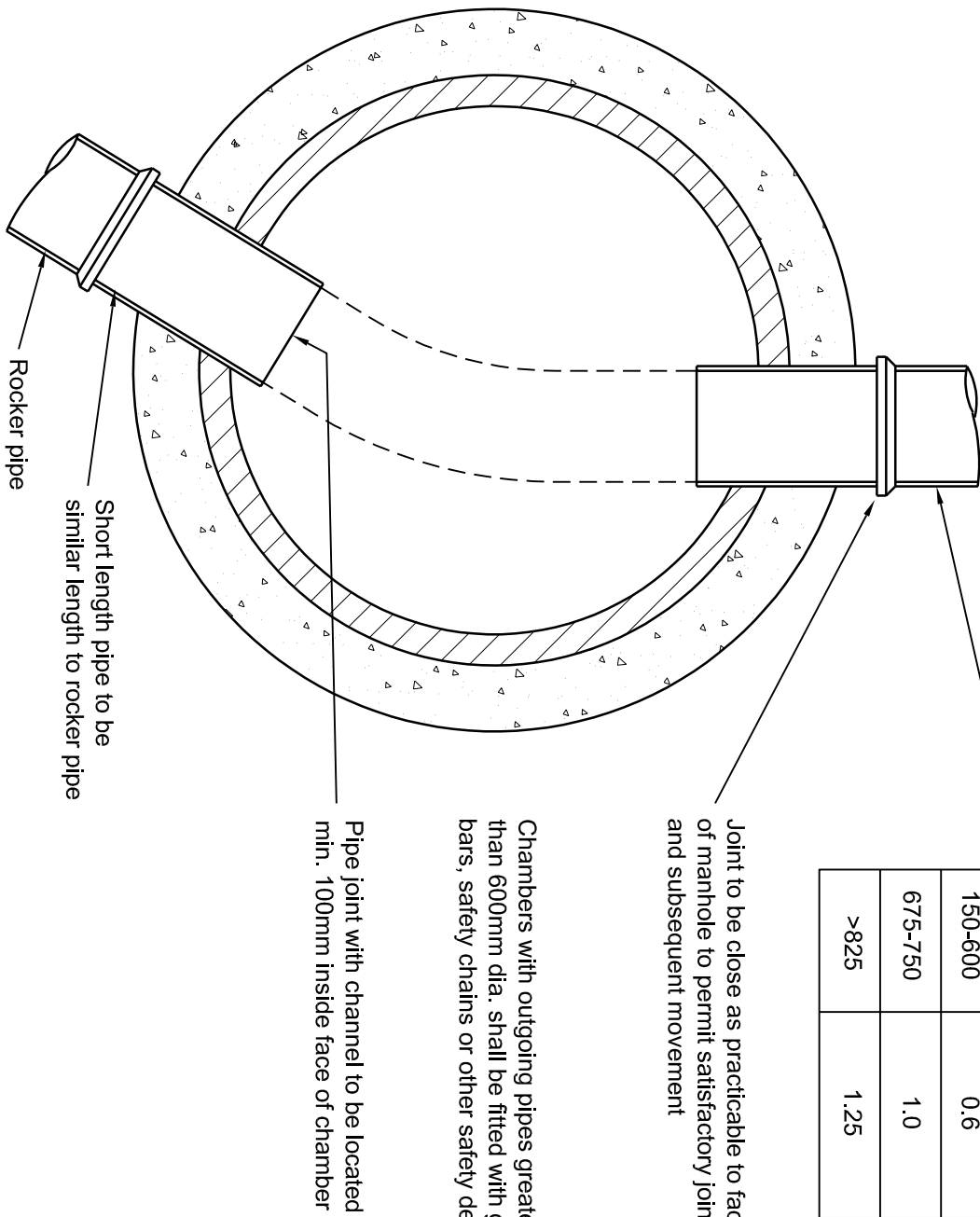
Main backfill material - See note 12 on this dwg.
Do not use heavy compactors before there is 600mm of material over pipes.



Class S Granular Bed and Surround
(Depth of cover greater than 1.2m)

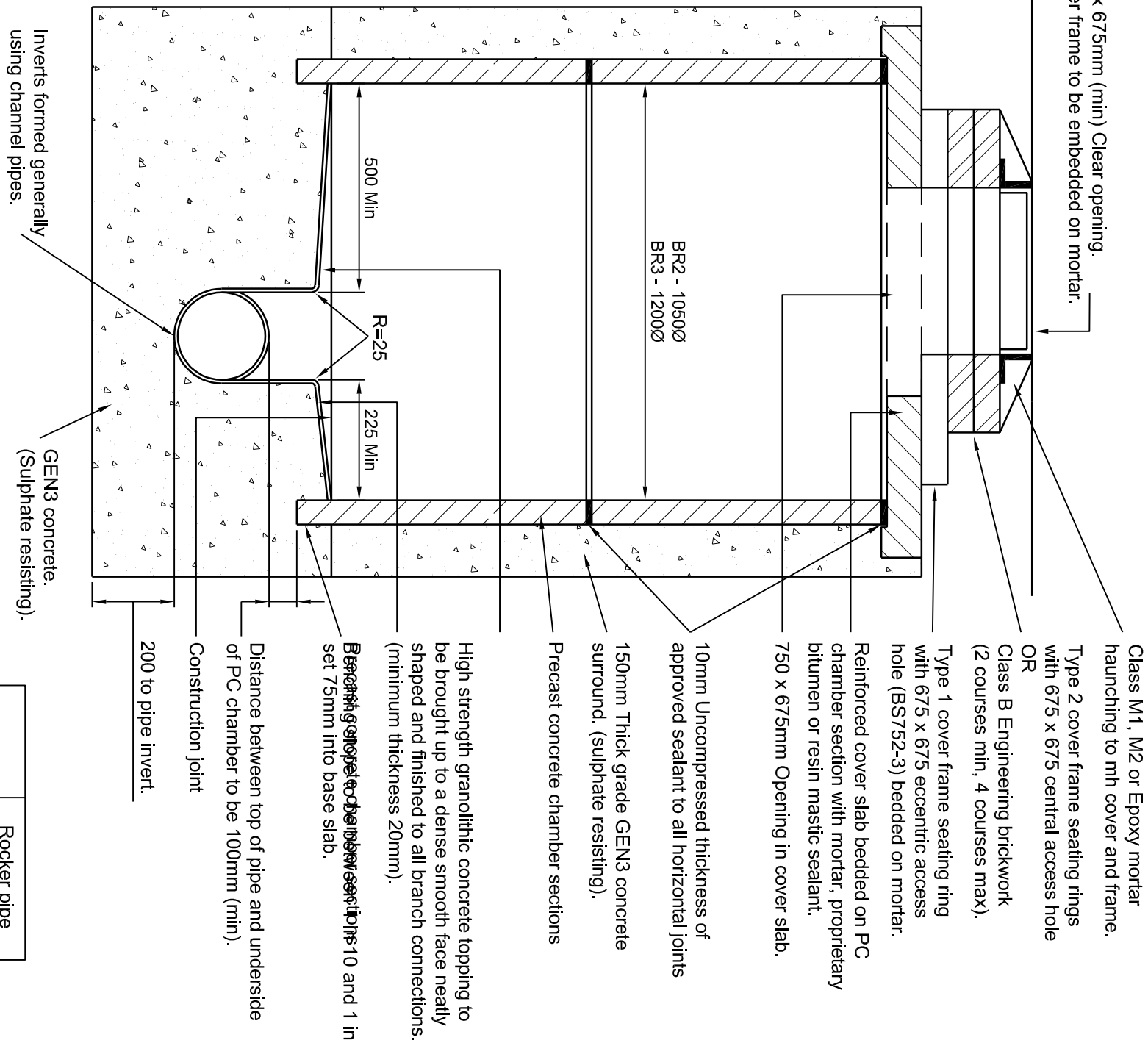


Class Z Concrete Bed and Surround
(Depth of cover less than 1.2m)



Typical Manhole Detail Type BR2 & BR3
(BR2 - Depth to soffit less than 1.5m)
(BR3 - Depth to soffit greater than 1.5m)

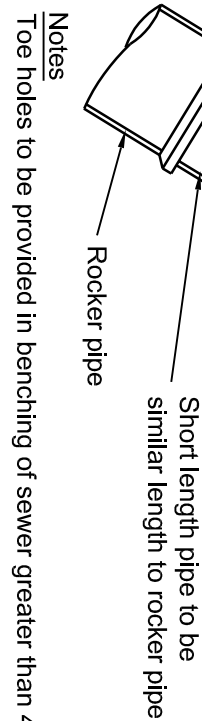
Pipe dia.	Rocker pipe effective length
150-600	0.6
675-750	1.0
>825	1.25



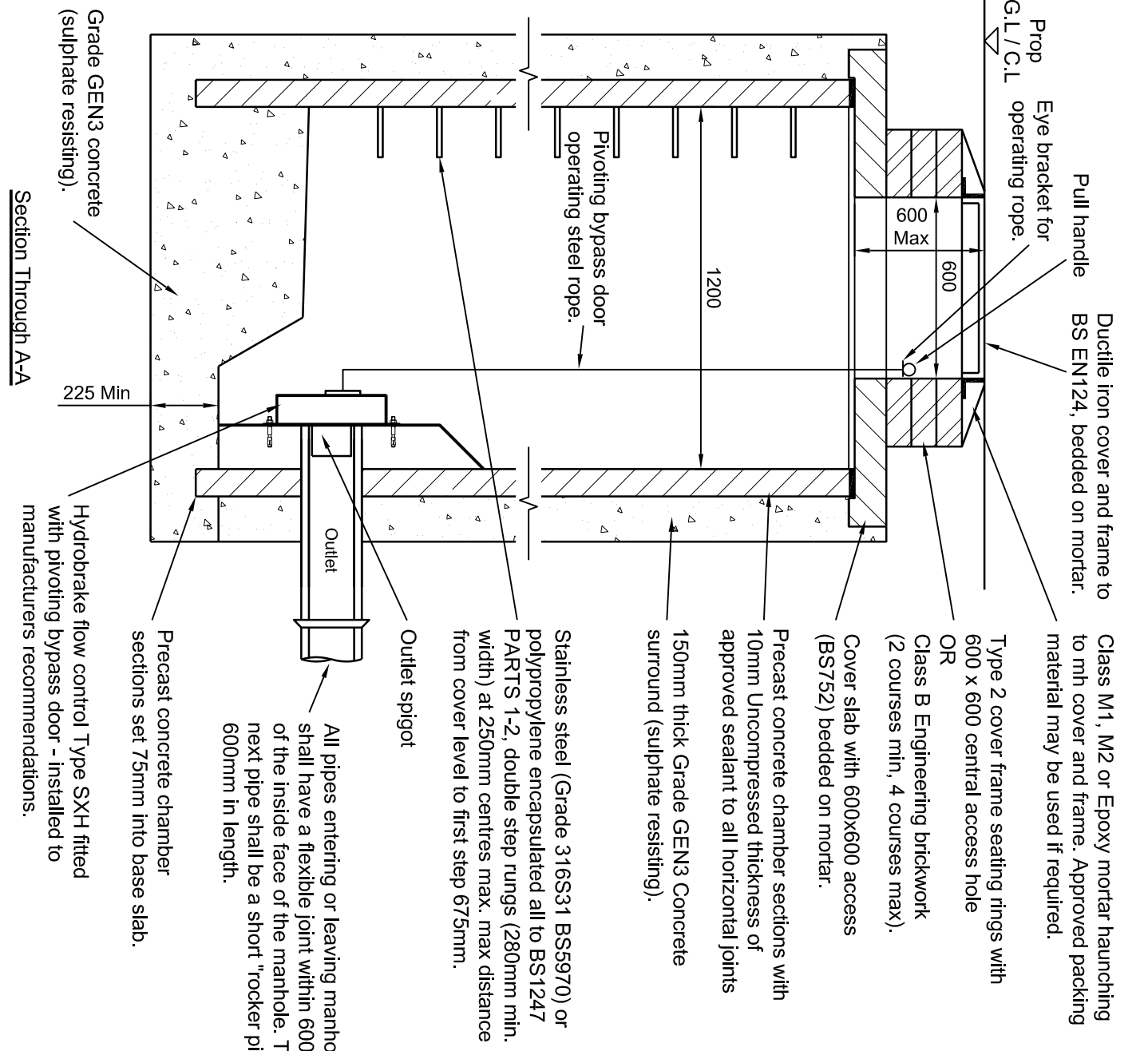
Chambers with outgoing pipes greater than 600mm dia. shall be fitted with guard bars, safety chains or other safety devices

Joint to be close as practicable to face of manhole to permit satisfactory joint and subsequent movement

Pipe joint with channel to be located min. 100mm inside face of chamber



Notes
Toe holes to be provided in benching of sewer greater than 450mm dia. for access to invert.



Flow Control Device Chamber