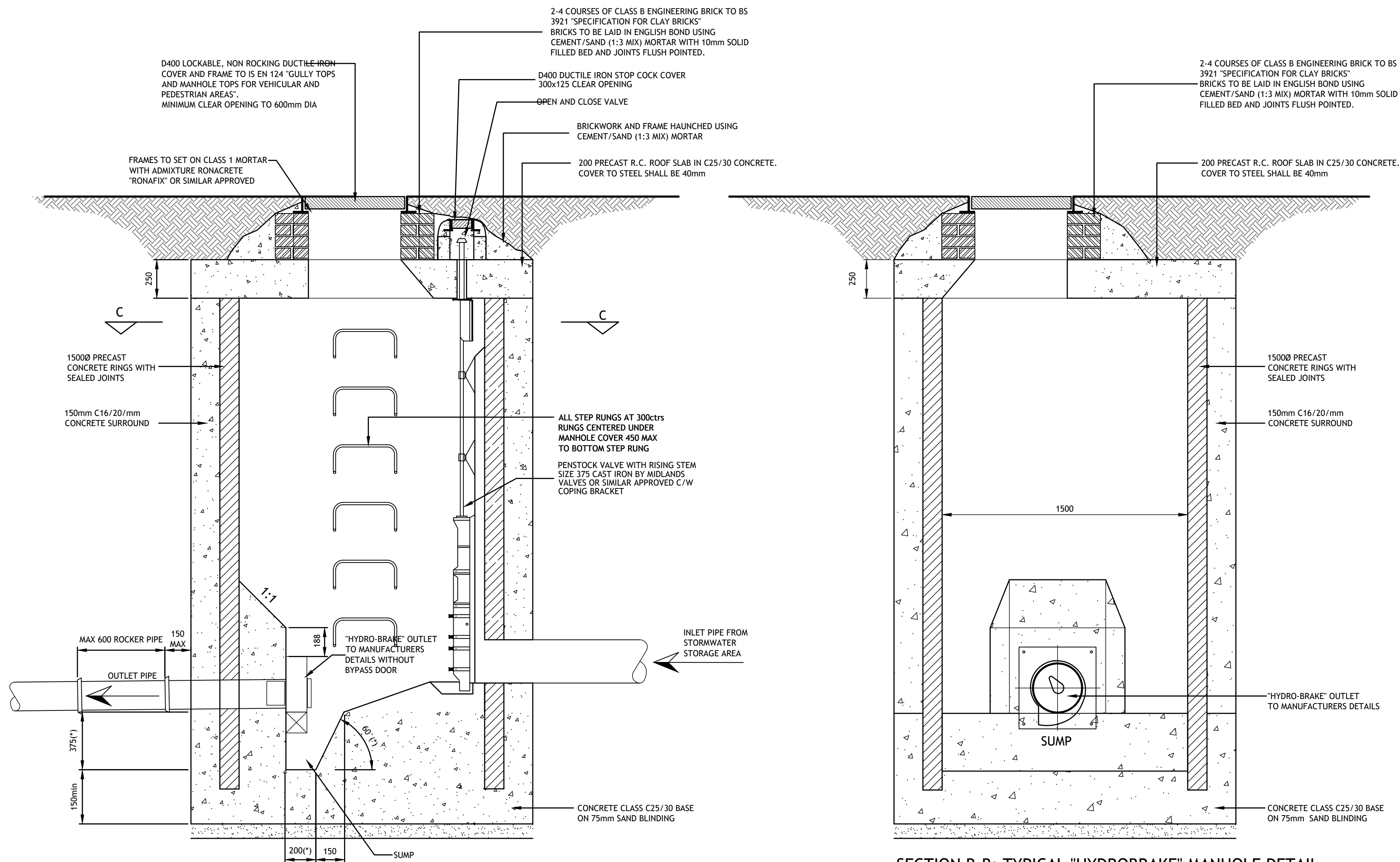
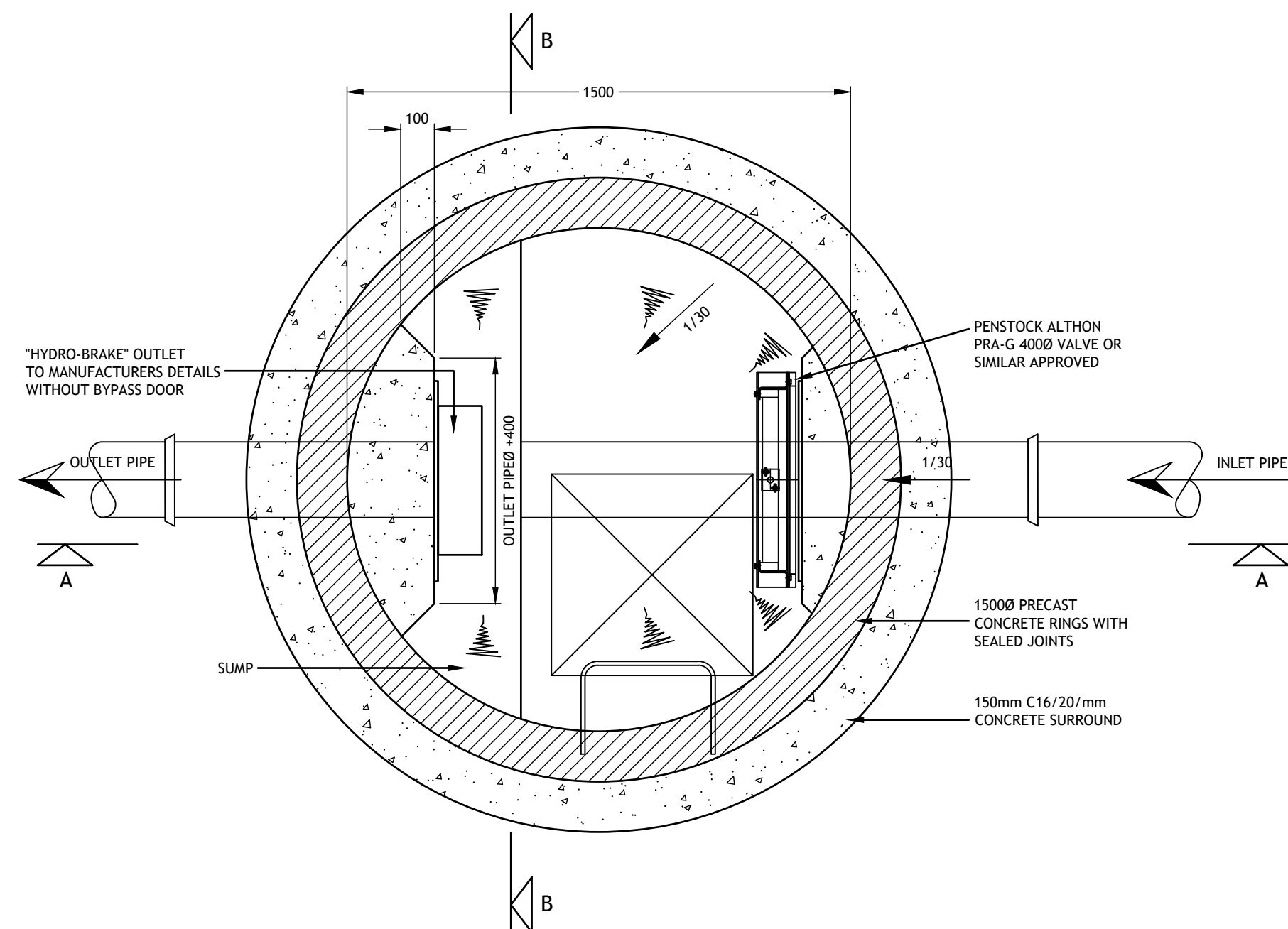


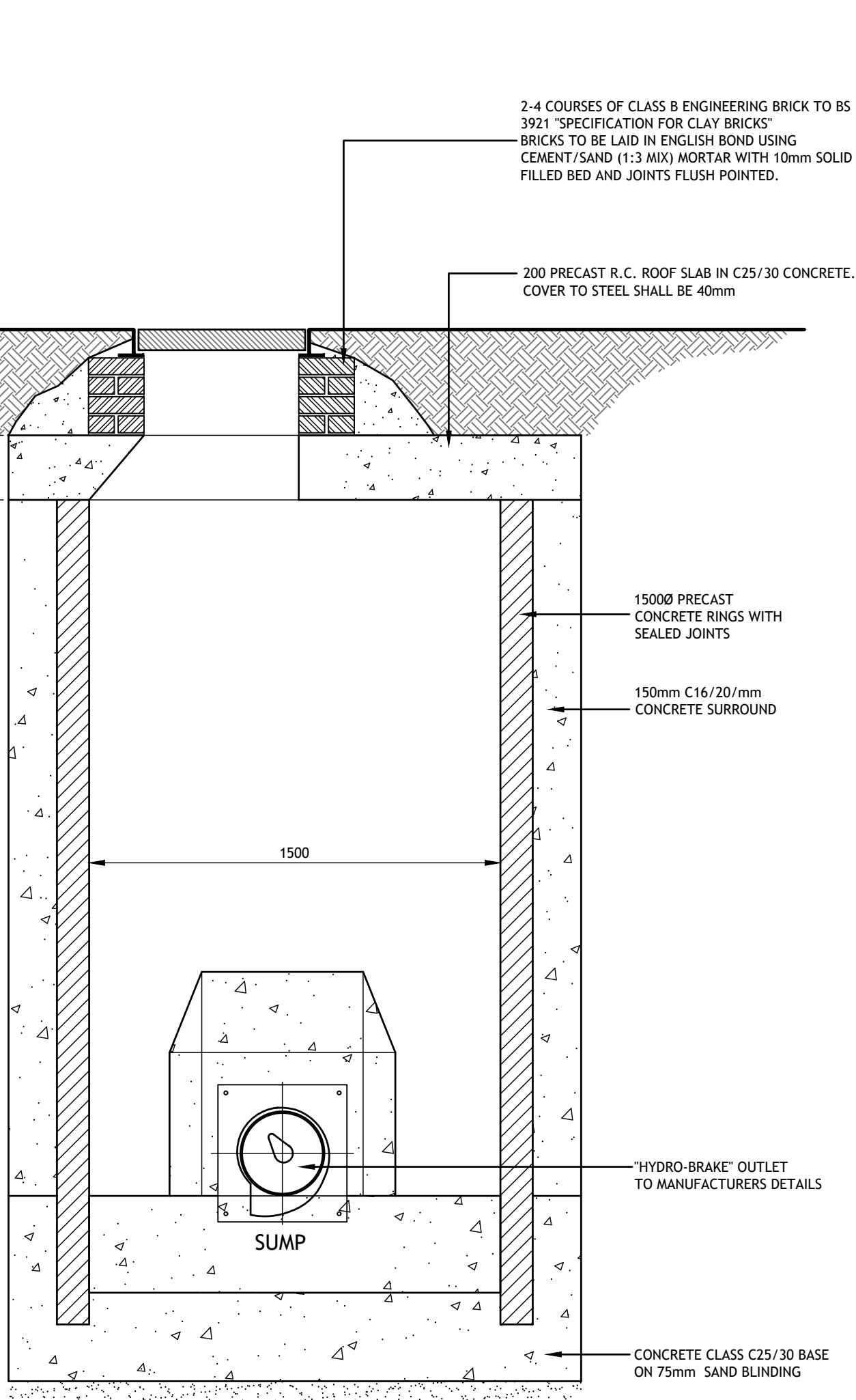


(*) DIMENSION TO BE APPROVED BY HYDRO-BRAKE SUPPLIERS

SECTION A-A: TYPICAL "HYDROBRAKE" MANHOLE DETAIL
SCALE 1:20



SECTION C-C: TYPICAL "HYDROBRAKE" MANHOLE DETAIL
SCALE 1:20



SECTION B-B: TYPICAL "HYDROBRAKE" MANHOLE DETAIL
SCALE 1:20

DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)
LESS THAN 375	1200
375 - 750	1500
750 - 900	1800
> 900	CONSULT LOCAL AUTHORITY

NOTE :
USE 1050 DIAMETER RINGS FOR PIPES LESS THAN 375mm DIAMETER WHERE DEPTH TO SOFFIT IS 1.35 - 1.5m

NOMINAL PIPE DIAMETER (mm)	EFFECTIVE LENGTH (M)
150 to 600	0.60
675 to 750	1.00
Over 750	1.25

- MANHOLE COVER TO BE HINGED AT RIGHT ANGLES TO KERBLINE SO THAT THEY CLOSE IN DIRECTION OF TRAFFIC.
- MANHOLE COVERS ON ROADS SHOULD BE LOCATED IN THE MIDDLE OF TRAFFICKED LANES INSIDE WHEEL TRACKS
- COVER AND FRAME TO BE INSTALLED SO THAT NO PART OF THE UNIT IS RAISED OR SUNKEN IN A WAY THAT COULD CAUSE A HAZARD TO PEDESTRIAN OR VEHICULAR TRAFFIC

NOTE :

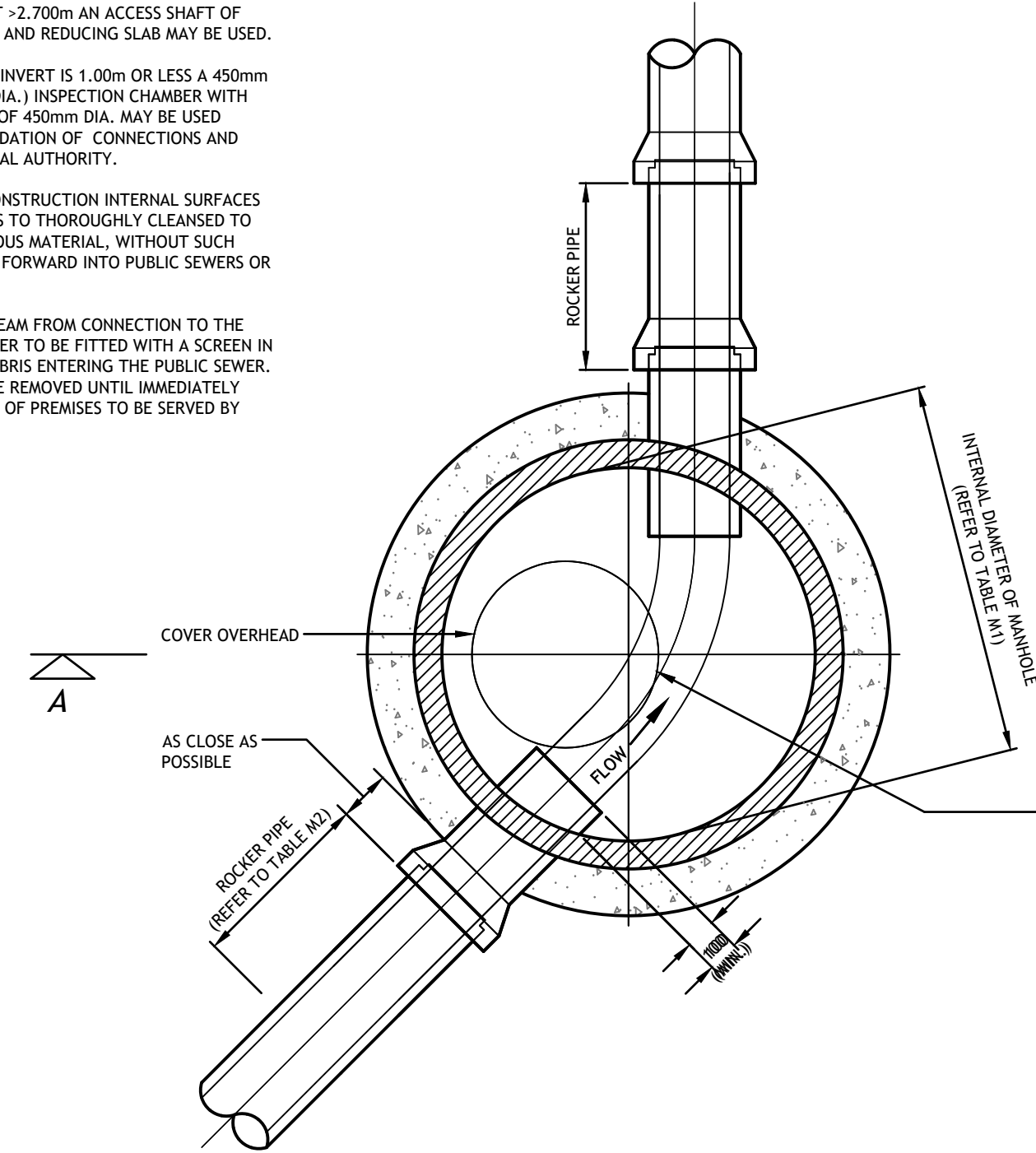
- MANHOLES WITH OUTGOING PIPES GREATER THAN 600mm DIA. SHOULD BE FITTED WITH GUARD BARS, SAFETY CHAINS OR OTHER SAFETY DEVICES.
- FOR DEPTHS TO INVERT >2.700m AN ACCESS SHAFT OF MIN. 900mm DIAMETER AND REDUCING SLAB MAY BE USED.
- WHERE THE DEPTH TO INVERT IS 1.00m OR LESS A 450mm x 450mm (OR 450mm DIA.) INSPECTION CHAMBER WITH MINIMUM COVER SIZES OF 450mm DIA. MAY BE USED SUBJECT TO ACCOMMODATION OF CONNECTIONS AND APPROVAL OF THE LOCAL AUTHORITY.
- ON COMPLETION OF CONSTRUCTION INTERNAL SURFACES OF MANHOLE & SEWERS TO THOROUGHLY CLEANSED TO REMOVE ALL DELETERIOUS MATERIAL, WITHOUT SUCH MATTER BEING PASSED FORWARD INTO PUBLIC SEWERS OR WATERCOURSES
- FIRST MANHOLE UPSTREAM FROM CONNECTION TO THE (EXISTING) PUBLIC SEWER TO BE FITTED WITH A SCREEN IN ORDER TO PREVENT DEBRIS ENTERING THE PUBLIC SEWER. THE SCREEN NOT TO BE REMOVED UNTIL IMMEDIATELY PRIOR TO OCCUPATION OF PREMISES TO BE SERVED BY SEWER.

NOTES

- DO NOT SCALE. ALL DIMENSIONS ON DRAWINGS ARE IN METERS UNLESS NOTED OTHERWISE. USE FIGURED DIMENSIONS ONLY.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER WORKS REQUIREMENTS
- CO-ORDINATES ARE TO IRISH TRANSVERSE MERCATOR (ITM)
- LOCATION OF EXISTING UTILITIES TO BE CONFIRMED WITH GPR SURVEY.

- NOTE :**
- MANHOLES WITH OUTGOING PIPES GREATER THAN 600mm DIA. SHOULD BE FITTED WITH GUARD BARS, SAFETY CHAINS OR OTHER SAFETY DEVICES.
 - FOR DEPTHS TO INVERT >2.700m AN ACCESS SHAFT OF MIN. 900mm DIAMETER AND REDUCING SLAB MAY BE USED.
 - WHERE THE DEPTH TO INVERT IS 1.00m OR LESS A 450mm x 450mm (OR 450mm DIA.) INSPECTION CHAMBER WITH MINIMUM COVER SIZES OF 450mm DIA. MAY BE USED SUBJECT TO ACCOMMODATION OF CONNECTIONS AND APPROVAL OF THE LOCAL AUTHORITY.
 - ON COMPLETION OF CONSTRUCTION INTERNAL SURFACES OF MANHOLE & SEWERS TO THOROUGHLY CLEANSED TO REMOVE ALL DELETERIOUS MATERIAL, WITHOUT SUCH MATTER BEING PASSED FORWARD INTO PUBLIC SEWERS OR WATERCOURSES
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SECTION A-A: TYPICAL MANHOLE
SCALE 1:20



SECTION B-B: TYPICAL MANHOLE
SCALE 1:20

D400 LOCKABLE, NON ROCKING DUCTILE IRON COVER AND FRAME TO IS EN 124 'GULLY TOPS AND MANHOLE TOPS FOR VEHICULAR AND PEDESTRIAN AREAS'. MINIMUM CLEAR OPENING TO 600mm DIA

2-4 COURSES OF CLASS B ENGINEERING BRICK TO BS 3921 & IS EN 771/772 'SPECIFICATION FOR CLAY BRICKS' BRICKS TO BE LAID IN ENGLISH BOND USING CEMENT/SAND (1:3 MIX) MORTAR WITH 10mm SOLID FILLED BED AND JOINTS FLUSH POINTED.

BRICKWORK AND FRAME HAUNCHED USING CEMENT/SAND (1:3 MIX) MORTAR

HEAVY DUTY PRECAST CONCRETE COVER TO COMPLY WITH BS EN 1917: 2002 'CONCRETE MANHOLES AND INSPECTION CHAMBERS, UNREINFORCED, STEEL FIBRE AND REINFORCED' AND BS 5911-3:2012 SPECIFICATION FOR UNREINFORCED AND REINFORCED CONCRETE MANHOLES AND SOAKAWAYS

CONCRETE SURROUND TO BE TAKEN UP FLUSH WITH COVER

JOINTING MATERIAL TO BE MORTAR, PROPRIETARY BITUMEN OR RESIN MASTIC SEALANT IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS

GRADE C16/20 CONCRETE SURROUND (VIBRATED). MINIMUM THICKNESS 150mm

LIFTING EYES IN PRECAST RINGS TO BE POINTED

STAGGER CONSTRUCTION JOINTS WITH JOINTS IN PRECAST RINGS BY MIN. 150mm

BENCHING SLOPE TO BE A MAX. 1:10, MIN OF 1:30. FINISH WITH SMOOTH HIGH STRENGTH CONCRETE APPLIED WITH STEEL TROWEL. MINIMUM THICKNESS 20mm. BENCHING TO BE NEATLY SHAPED TO ALL BRANCH CONNECTIONS

50mm MINIMUM 300mm MAXIMUM

TABLE M1 - INTERNAL DIAMETER OF MANHOLES

DIAMETER OF LARGEST PIPE IN MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)
LESS THAN 375	1200
375 - 450	1350
500 - 700	1500
750 - 900	1800
> 900	CONSULT LOCAL AUTHORITY

NOTE :

USE 1050 DIAMETER RINGS FOR PIPES LESS THAN 375mm DIAMETER WHERE DEPTH TO SOFFIT IS 1.35 - 1.5m

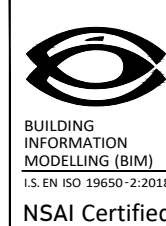
TABLE M2 - ROCKER PIPE LENGTH

NOMINAL PIPE DIAMETER (mm)	EFFECTIVE LENGTH (M)
150 to 600	0.6
675 to 750	1.0
Over 750	1.2

- MANHOLE COVER TO BE HINGED AT RIGHT ANGLES TO KERBLINE SO THAT THEY CLOSE IN DIRECTION OF TRAFFIC.
- MANHOLE COVERS ON ROADS SHOULD BE LOCATED IN THE MIDDLE OF TRAFFICKED LANES INSIDE WHEEL TRACKS
- COVER AND FRAME TO BE INSTALLED SO THAT NO PART OF THE UNIT IS RAISED OR SUNKEN IN A WAY THAT COULD CAUSE A HAZARD TO PEDESTRIAN OR VEHICULAR TRAFFIC

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Rev	Amendment	By	Date	Rev	Amendment	By	Date
P01	PART 8 PLANNING	PF	14-06-2023				
C01	PART 8 PLANNING	PF	01-12-2023				

Rev	Amendment	By	Date

Client:	
Comhairle Cathrach Bhaile Átha Cliath Dublin City Council	



Project:	NEW LIBRARY CRUMLIN ROAD
Title:	Standard Details Sheet 02 of 05
Drawn:	PF
Date drawn:	02-06-2023
Technician Check:	NH
Engineer Check:	DT
Approved:	LB
Project No:	232168
Model Ref:	232168-PUNCH-XX-XX-M2-0500
Drawing Status:	A0
Scale @ A1:	AS SHOWN
Document No:	232168-PUNCH-XX-XX-DR-C-0502
Revision No:	C01