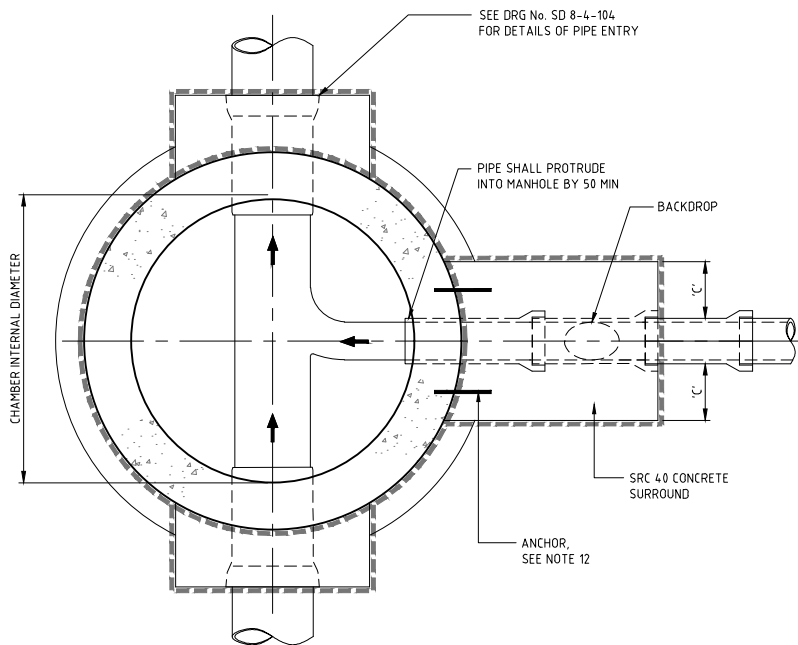
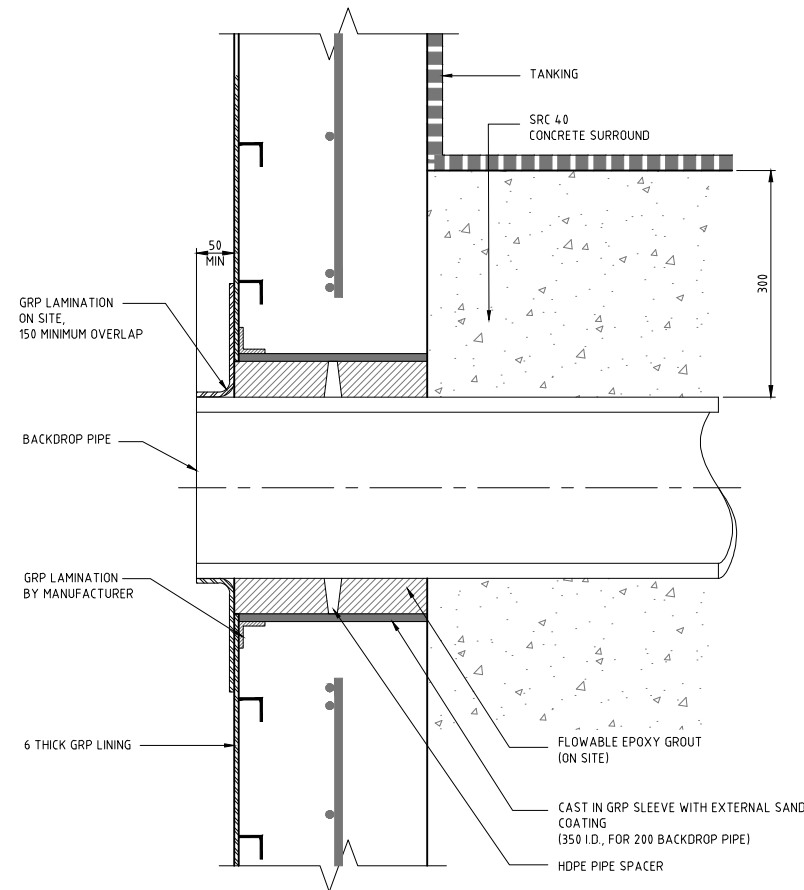


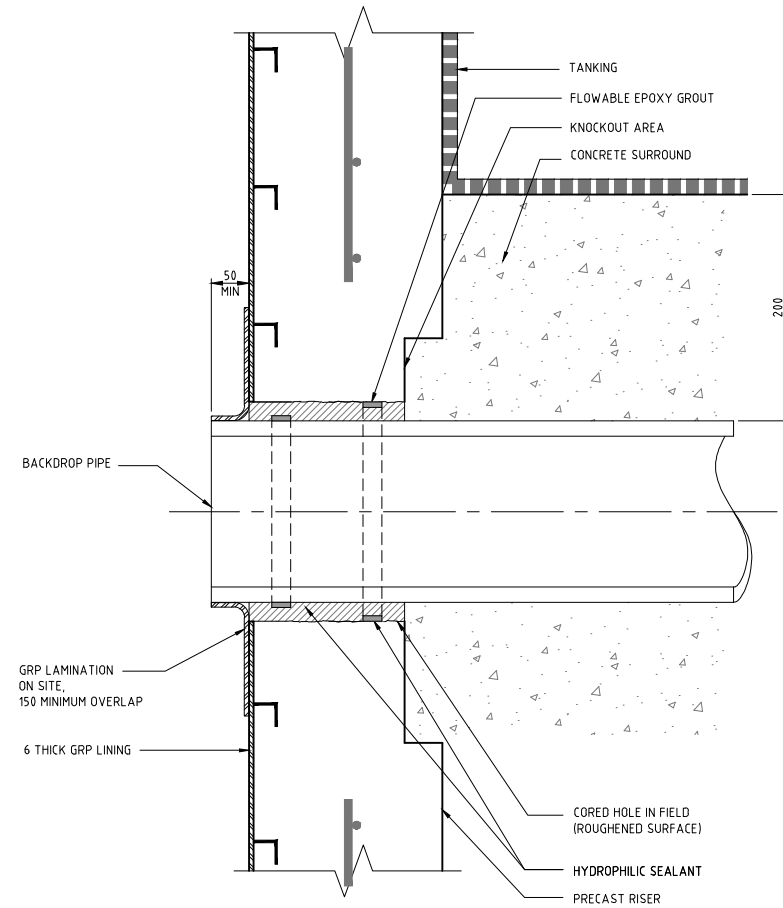


PLAN

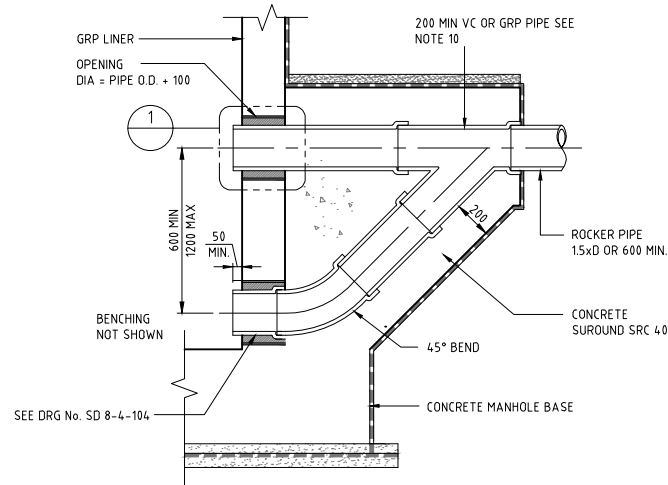
NOTE: SEE DRG NO. SD-8-4-226 FOR DIMENSION TABLE



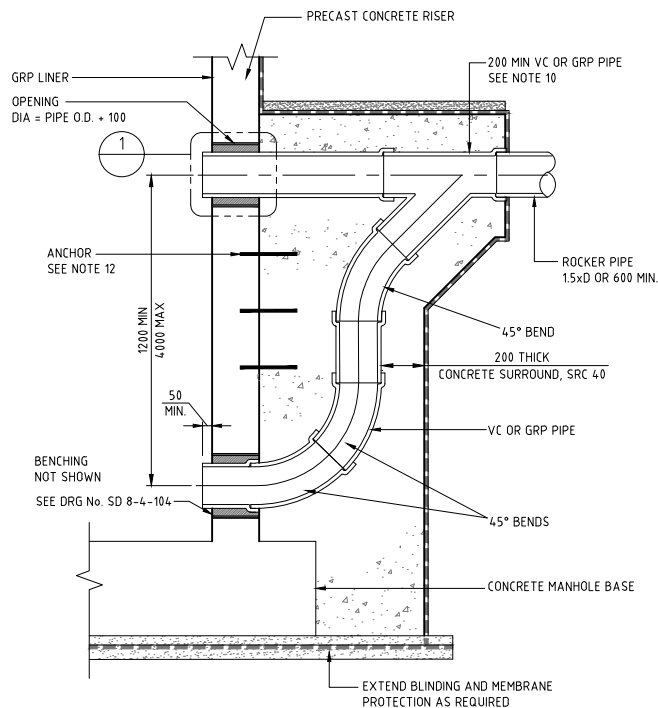
CAST OPENING DETAIL 1



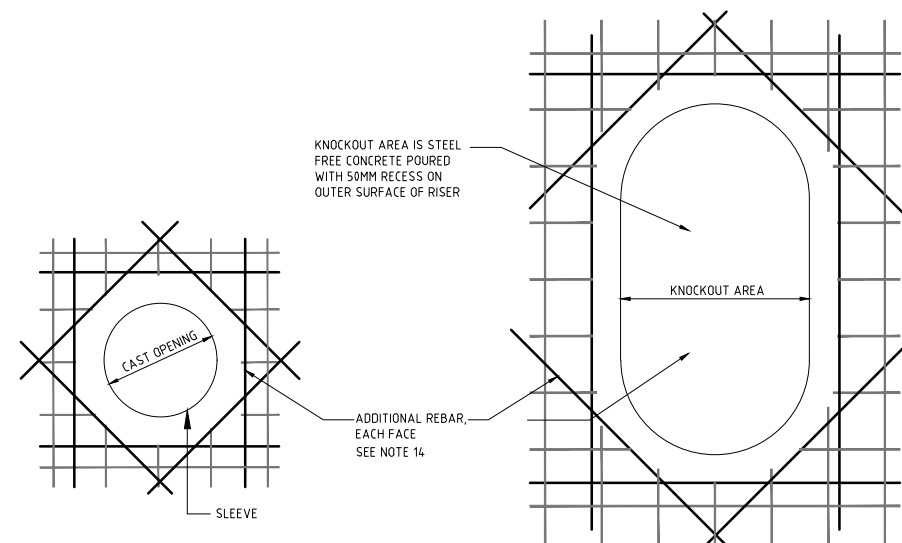
OPTIONAL CORED OPENING



TYPICAL RAMP BACKDROP CONNECTION DETAIL



TYPICAL VERTICAL BACKDROP CONNECTION DETAIL



CAST OPENING

KNOCKOUT/CORED OPENING

REINFORCEMENT DETAILS

NOTES:

- FOR GENERAL NOTES, LEGEND AND ABBREVIATIONS REFER TO DRG Nos. SD 1-1-101.
- ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CURRENT Q.C.S. UNLESS OTHERWISE AGREED WITH THE ENGINEER.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
- ALL JOINTS BETWEEN PIPES AND CONCRETE SHALL BE WATERTIGHT.
- ALL CONCRETE COVER FOR REINFORCEMENT TO BE 75mm MIN.
- SEE DRAWING No. SD 8-4-103 FOR TANKING DETAILS.
- BACKDROP PIPES SHALL BE VITRIFIED CLAY OR GRP SPIGOT AND SOCKET JOINT UNLESS OTHERWISE STATED AND SHALL COMPLY WITH THE REQUIREMENTS STATED IN THE SPECIFICATIONS.
- WHERE THERE IS A DIFFERENCE IN LEVEL BETWEEN THE INVERT LEVEL OF INCOMING AND OUTGOING PIPES THE FOLLOWING RULES APPLY:
 - WHERE THE DIFFERENCE IN LEVEL IS LESS THAN 600mm THE PIPE CONNECTION MAY BE DIRECT THROUGH THE MANHOLE OR GRADIENT ADJUSTED TO SUIT.
 - WHERE THE DIFFERENCE IN LEVEL IS GREATER THAN 600mm AND LESS THAN 1200mm A RAMP BACKDROP SHALL BE CONSTRUCTED.
 - WHERE THE DIFFERENCE IN LEVEL IS 1200mm OR MORE A VERTICAL BACKDROP SHALL BE CONSTRUCTED.
- WHERE INCOMING AND OUTGOING PIPE DIAMETERS DIFFER A TAPERED CHANNEL IN THE BENCHING SHALL BE PROVIDED.
- WHERE INCOMING PIPE CONNECTING TO BACKDROP IS 150mm DIA A 150/200mm TAPER SHALL BE PROVIDED. IF INCOMING PIPE IS GREATER THAN 200mm DIA THE BACKDROP SHALL BE OF THE SAME DIAMETER.
- ANY EXCESS EXCAVATION BELOW BACKDROP TO BE FILLED WITH CONCRETE GRADE SRC 20.
- 16 DIAMETER REINFORCEMENT BARS, 300mm LONG EMBEDDED 100mm INTO PRECAST CONCRETE MANHOLE @300 CENTERS VERTICALLY, BOTH SIDES OF BACKDROP RESIN ANCHOR.
- PIPE OPENINGS WILL NOT BE PERMITTED THROUGH PRECAST MANHOLE JOINT, A MINIMUM DISTANCE FROM TOP OR BOTTOM OF ANY OPENING SHALL BE 150 PLUS JOINT DEPTH.
- 50% OF AREA OF DISPLACED STEEL REPLACED IN EACH ELEVATION IN BOTH FACES, BAR LENGTH = 90xDIA MIN.
- STRUCTURAL DESIGN OF PRECAST MANHOLES TO BE IN ACCORDANCE WITH BS 5400 AND DESIGN CRITERIA SET FORTH IN THE LRDP DESIGN MANAGEMENT MANUAL, APPENDIX H.
- MIN STEEL TO BE .0035x1000x"t" IN EACH DIRECTION.

3	APR 19	ISSUED FOR USE	
2	01 MAR 19	REVALIDATED ISSUE	
1	23NOV15	ISSUED FOR USE	
0	15SEP13	ISSUED FOR USE	

Rev.	Date	Revision Details	Appd.
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PROJECTS AFFAIRS

QCS Section:

Section 8 - Drainage Works
Part 4 - Pipeline Installation

Drawing Title:

**FOUL SEWER
PRECAST MANHOLE**

Approved:	Sheet No: 1 OF 1
Date: APRIL 2019	Scale: 1:20; 1:5 on A1
Drawing Number: SD 8-4-209	Revision: 3