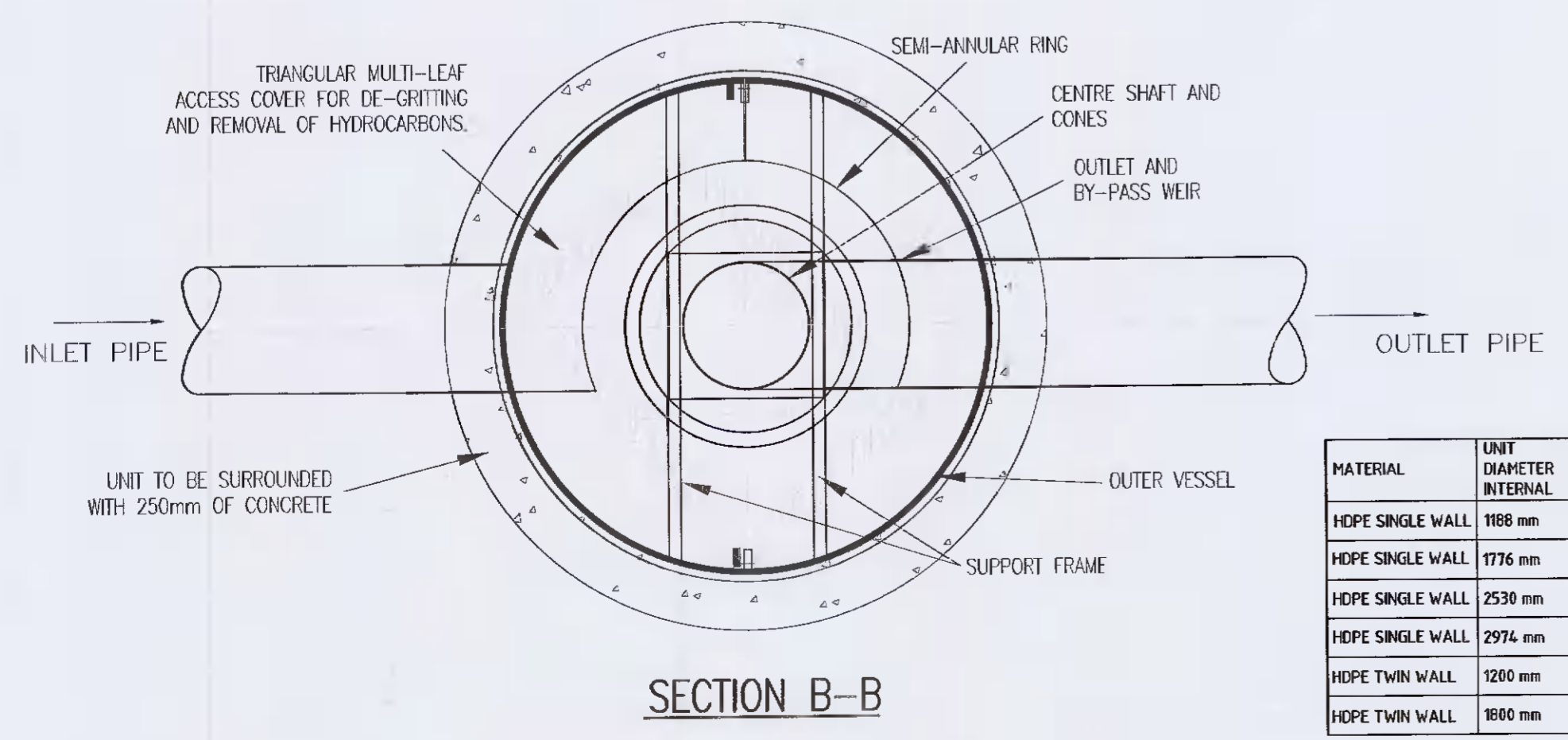
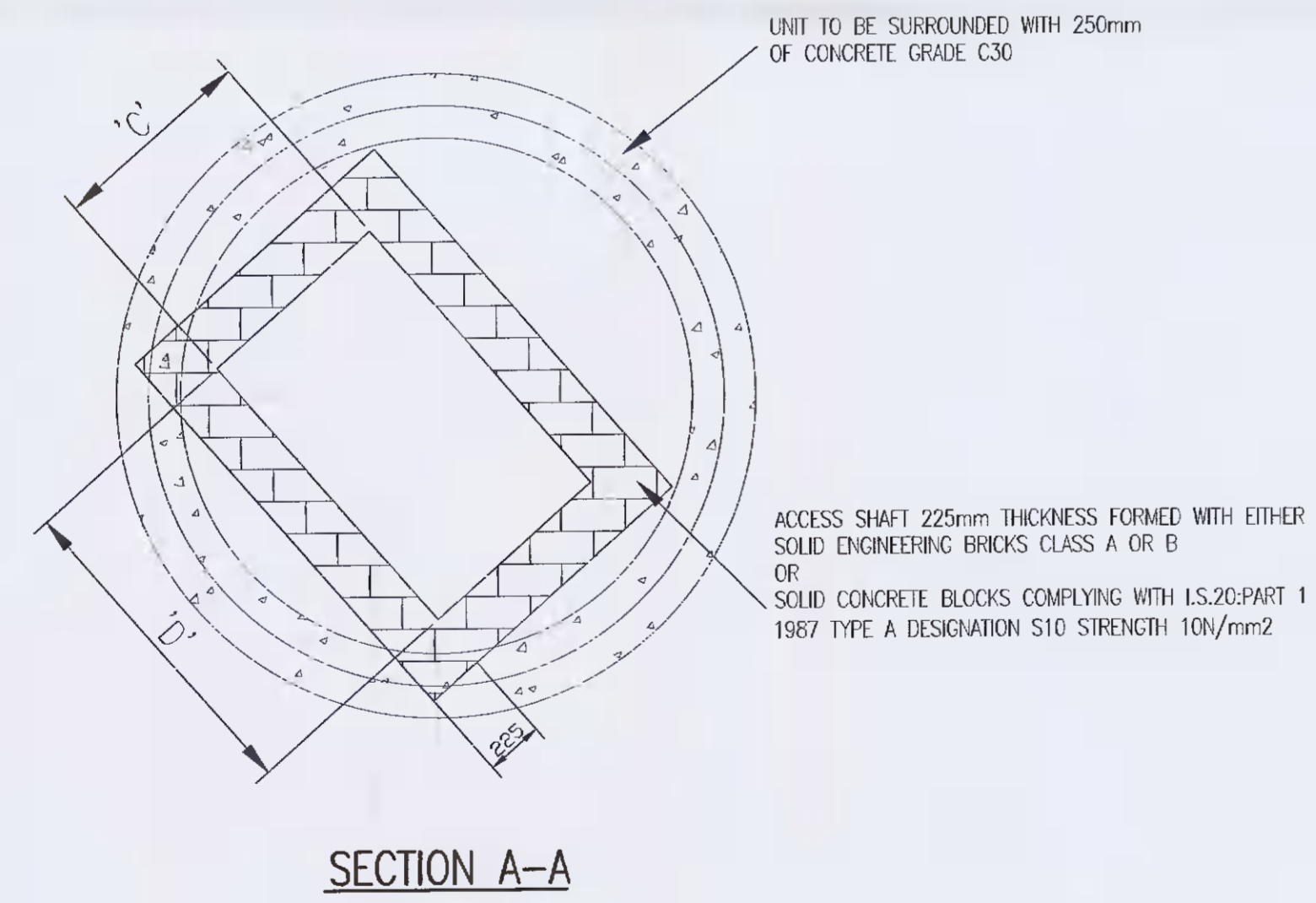
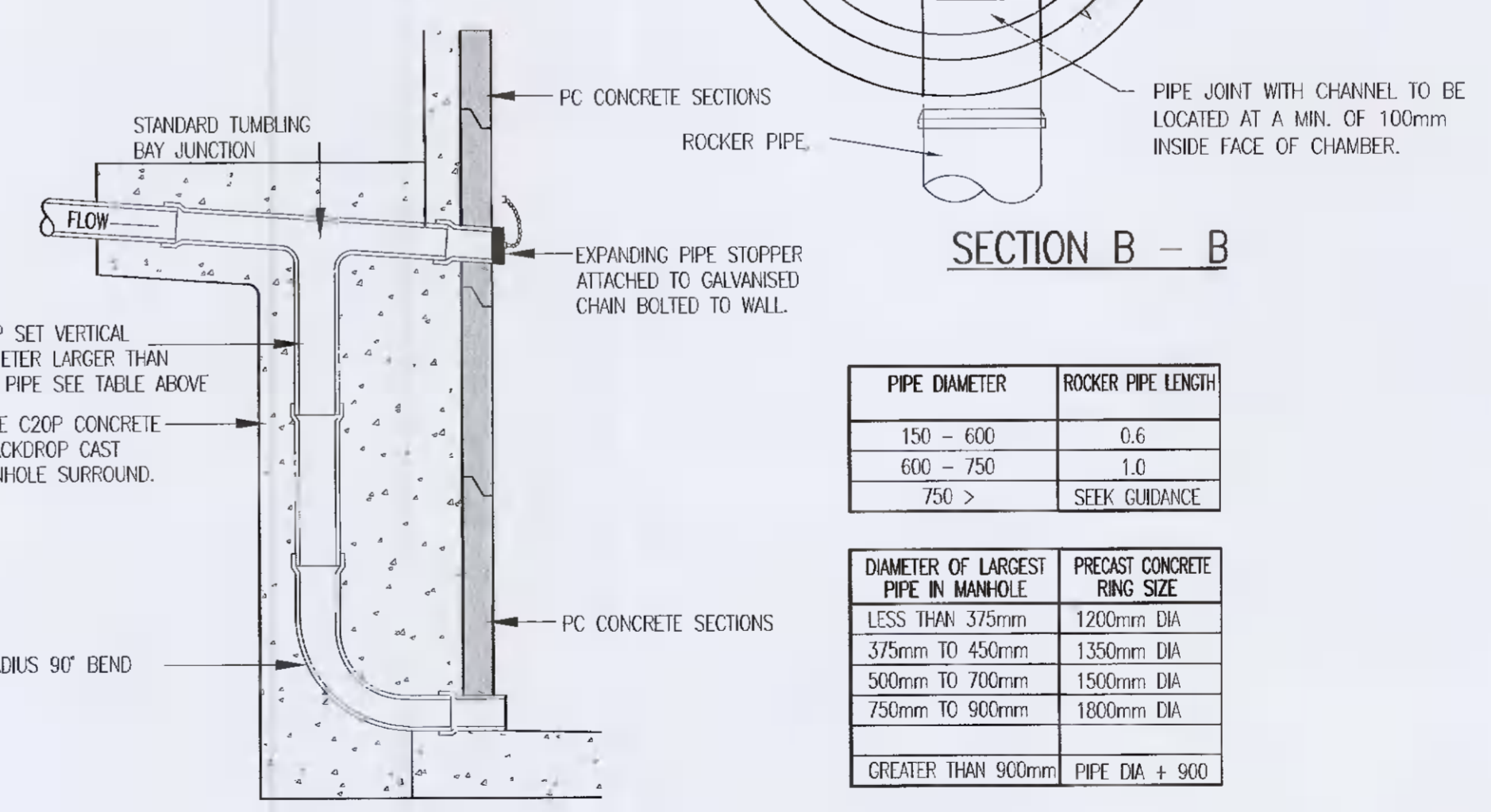
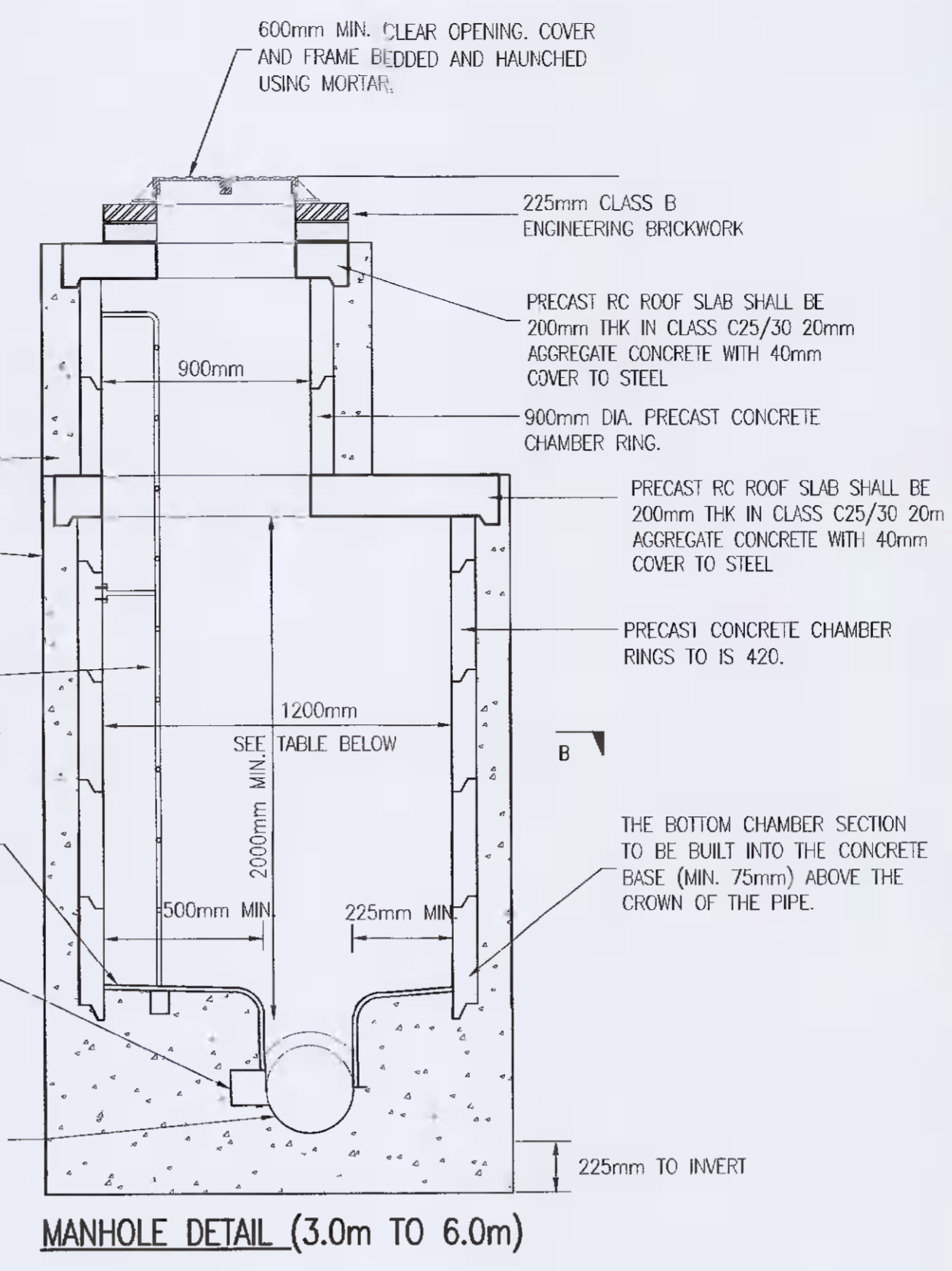
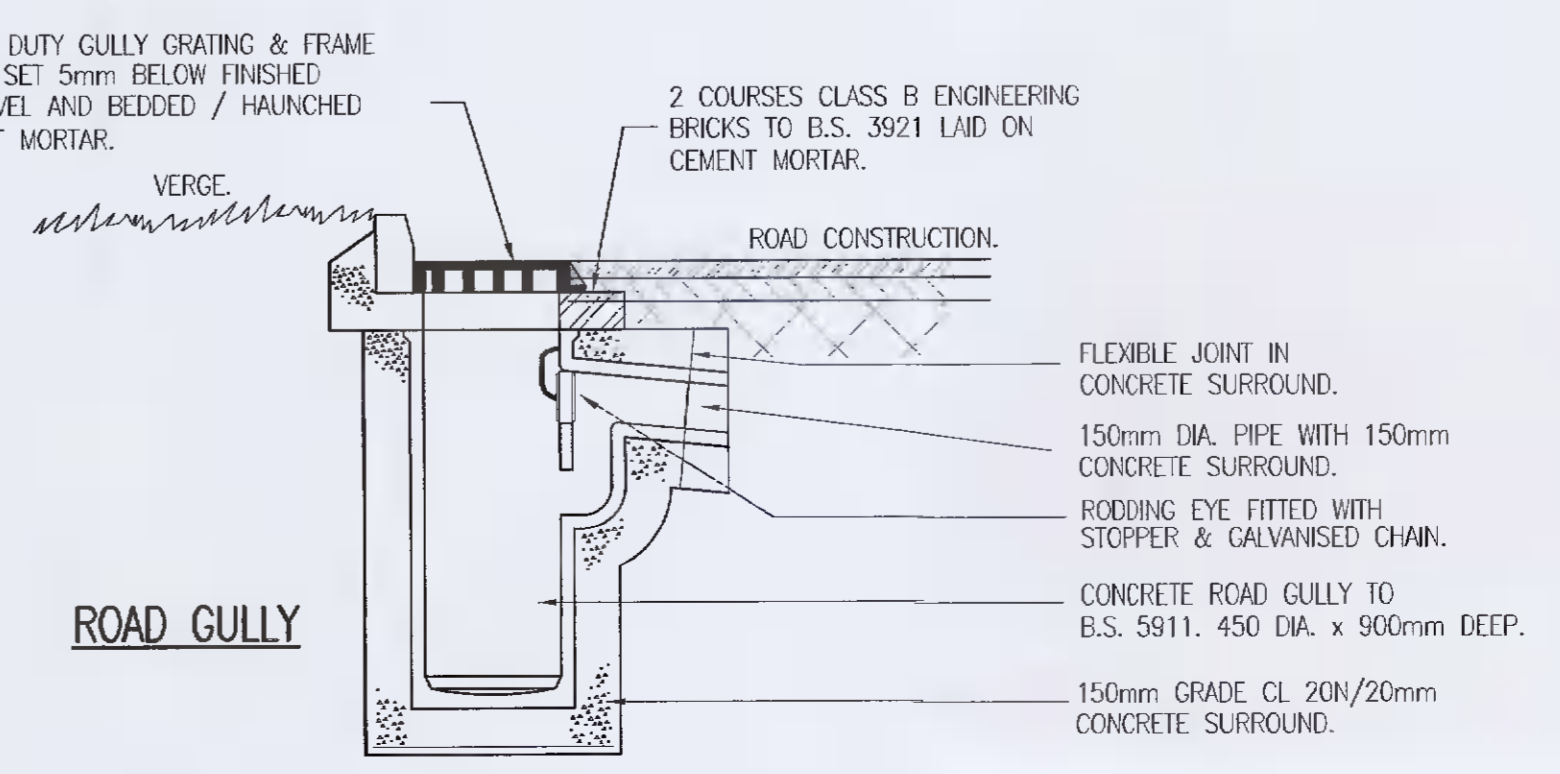


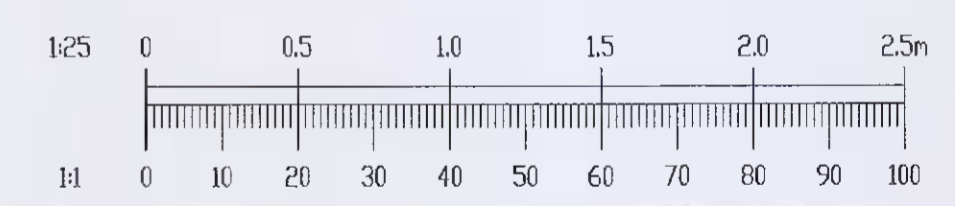
INLET DIA. (mm)	DROP DIA. (mm)
225	300
300	375
375	375
450	450
525	450
600	450
750	600
900	600



MATERIAL	UNIT DIAMETER INTERNAL	UNIT DIAMETER EXTERNAL	'A' (mm)	'B' (mm)	'C' (mm)	'D' (mm)	'E' (mm)	DESIGN FLOW (L/s)	CAPACITY	INLET/OUTPUT PIPE DIAMETER (mm)
HDPE SINGLE WALL	1168 mm	1200 mm	1558	1873	600	600	1200	30	120	300
HDPE SINGLE WALL	1176 mm	1812 mm	2125	2625	600	600	1812	69	270	500
HDPE SINGLE WALL	2530 mm	2570 mm	2945	3575	600	750	2570	138	542	600
HDPE SINGLE WALL	2974 mm	3000 mm	3130	3930	600	750	3000	190	750	800
HDPE TWIN WALL	1260 mm	1700 mm	1568	1883	600	750	1700	30	120	300
HDPE TWIN WALL	1800 mm	2280 mm	2467	2967	600	900	2300	69	270	560



- NOTES:
- DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
  - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL/ENGINEERING DRAWINGS AND THE GREATER DUBLIN REGIONAL CODE OF PRACTICE VED.
  - TYPE A GRANULAR FILL SHALL CONSIST OF WASHED PEA GRAVEL. ALL MATERIAL SHALL PASS A 19mm B.S. SIEVE TEST AND SHALL BE REPAVED BY A 4.75mm B.S. SIEVE TEST.
  - SELECTED FILL SHALL BE FREE FROM STONES GREATER THAN 25mm IN SIZE, BUILDERS RUBBLE VEGETABLE MATTER AND LUMPS OF CLAY GREATER THAN 75mm IN SIZE AND SHALL BE COMPACTED IN 150mm LAYERS.
  - IN OPEN SPACES BACKFILL SHALL CONSIST OF SUITABLE SELECTED EXCAVATED MATERIAL. UNDER PAVED AREAS BACKFILL SHALL CONSIST OF CLAUSE 806 GENERAL BACKFILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 150mm THICK.
  - CONCRETE BED AND SURROUND SHALL BE USED ON ALL PIPES WHERE COVER TO THE SOFT OF THE PIPE IS LESS THAN 1.2m IN ROADS, FOOTPATHS AND GRASS MARGINS AND 0.5m IN OPEN SPACES AND FIELDS.
  - ALL CONCRETE FOR PIPE BEDDING, HAUNCHING AND SURROUNDS SHALL BE GRADE CL 20N/20mm.
  - ALL MANHOLES SHALL BE WATER TIGHT TO THE SATISFACTION OF THE LOCAL AUTHORITY/COUNCIL.
  - FORMWORK FOR REINFORCED CONCRETE AND MASS CONCRETE SHALL BE CLASS F2.
  - CLASS U2 FINISH TO THE TOP OF SLABS. REINFORCEMENT TO SLABS TO ENGINEERS DETAILS.
  - 200mm THICK CL. 30N/20mm MASS CONCRETE FOUNDATIONS. 225 THICK PRECAST R.C. ROOF SLAB IN CL. 30N/20mm CONCRETE. COVER TO STEEL TO BE 40mm.
  - TOE HOLES OF 230mm MINIMUM DEPTH AND GALVANISED STEEL SAFETY RAILINGS TO BE PROVIDED IN BENCHING OF SEWERS GREATER THAN 450mm DIAMETER AND DEPTH TO INVERT >3m FOR ACCESS TO INVERT.
  - A SAFETY CHAIN IS TO BE PROVIDED ON SEWER PIPES THAT EXCEED 450mm IN DIAMETER. MID STEEL SAFETY CHAIN SHALL BE 10mm NOMINAL SIZE (GRADE M4) NON CALIBRATED CHAIN, TYPE 1, COMPLYING WITH B.S.4942 PART 2 OR EQUIVALENT.
  - WHEN DEPTH OF MANHOLES TO INVERT IS GREATER THAN 3.0m LADDERS SHALL BE USED INSTEAD OF RUNGS. FIXED LADDERS SHOULD MEET THE DIMENSIONAL REQUIREMENTS OF B.S.4211 OR EQUIVALENT EXCEPT THAT STRINGERS SHOULD NOT BE LESS THAN 65 x 12mm IN SECTION AND RUNGS 25mm IN DIAMETER.
  - LADDER STRINGERS SHOULD BE ADEQUATELY SUPPORTED FROM THE MANHOLE WALL AT INTERVALS OF NOT MORE THAN 2.0m STRINGERS SHOULD BE BOLTED TO CLEATS TO FACILITATE RENEWAL.
  - ALL LADDERS, RUNGS, HANDRAILS, SAFETY CHAIN, ETC. SHALL BE HOT DIP GALVANIZED TO B.S.729 OR EQUIVALENT.
  - ALL DRAINAGE WORKS SHALL BE CONSTRUCTED STRICTLY IN ACCORDANCE WITH SOUTH DUBLIN COUNTY COUNCIL REQUIREMENTS FOR TAVING IN CHARGE AND GREATER DUBLIN REGIONAL CODE OF PRACTICE FOR DRAINAGE WORKS.
  - PERTAINING TO Foul WATER DRAINAGE WORKS - IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT ALL WORKS ARE CONSTRUCTED IN ACCORDANCE WITH THE IRISH WATER CODE OF PRACTICE AND STANDARD DETAILS. THE CODE OF PRACTICE AND STANDARD DETAILS ARE AVAILABLE TO DOWNLOAD FROM THE IRISH WATER WEB SITE AT WWW.WATER.ie/CONTRACTORS/DEVELOPER-SERVICES/ WHERE THE DETAILS CONTAINED ON THIS DRAWING DIFFER FROM THE IRISH WATER CODE OF PRACTICE OR STANDARD DETAILS THIS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY. IRISH WATER STANDARDS WILL TAKE PRECEDENCE.
  - FOR DOWNSTREAM DEFENDER DETAILS REFER TO MANUFACTURER'S HYDRO INTERNATIONAL DESIGN DATA AND INSTALLATION DETAILS. MANUFACTURER'S DETAILS SUPERCEDE THIS DRAWING'S DETAILS.



REV.	DATE	AMENDMENT	DRN	APPD
-	20/05/21	PLANNING ISSUE	PW	IS

STATUS **FOR PLANNING ONLY NOT FOR CONSTRUCTION**

**Waterman Moylan**  
Engineering Consultants

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CLIENT	QUINTAIN DEVELOPMENTS IRELAND LTD
ARCHITECT	BKD ARCHITECTS
PROJECT	ADERRIG PHASE 2
TITLE	SURFACE WATER CONSTRUCTION DETAILS SHEET 1 OF 2

DRAWN PI	DESIGNED PI	APPROVED IS	DATE MAY 2021
SCALE 1:25 @A1	JOB NO 20-108	DRG. NO. P220	REVISION -

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