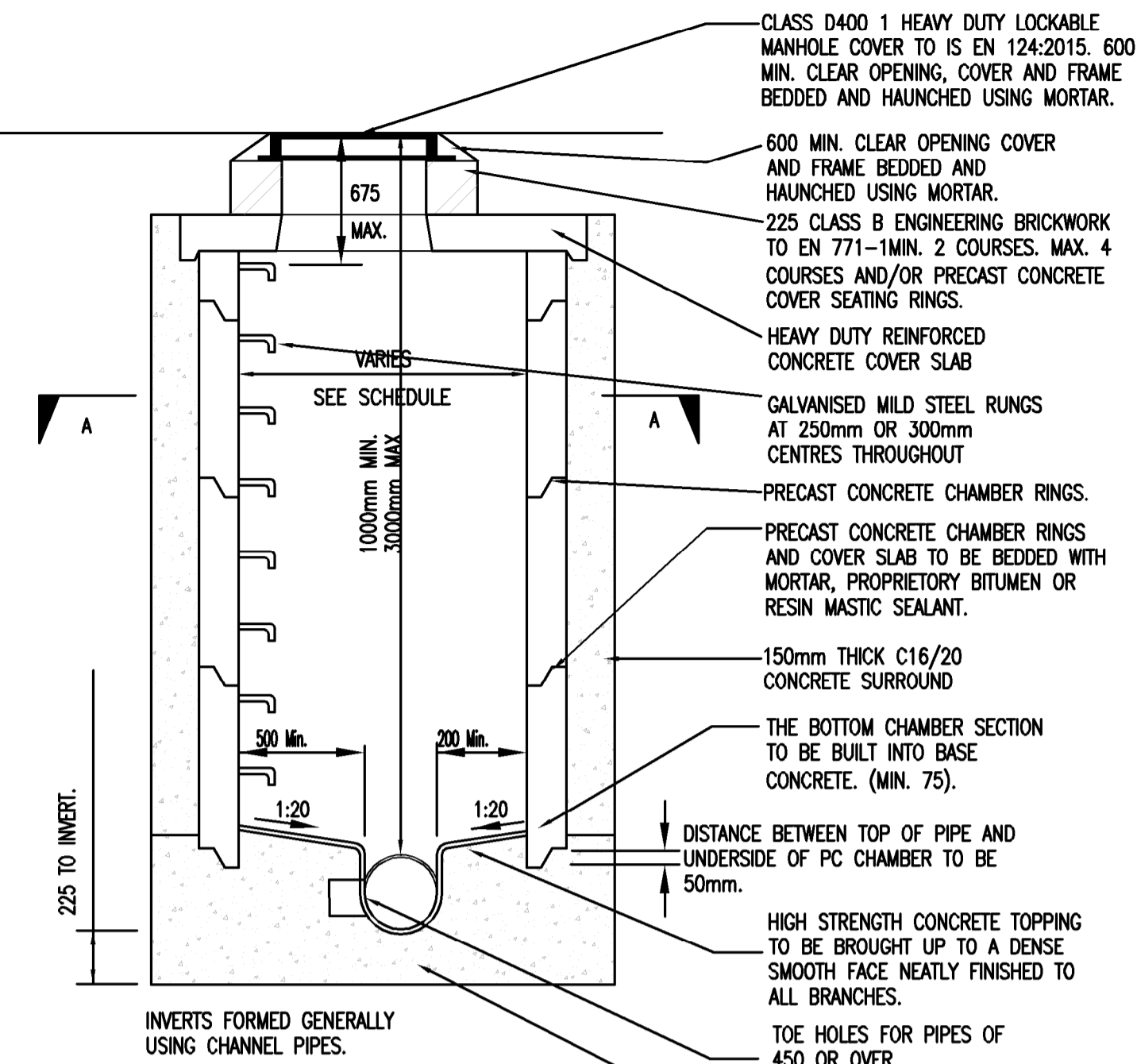
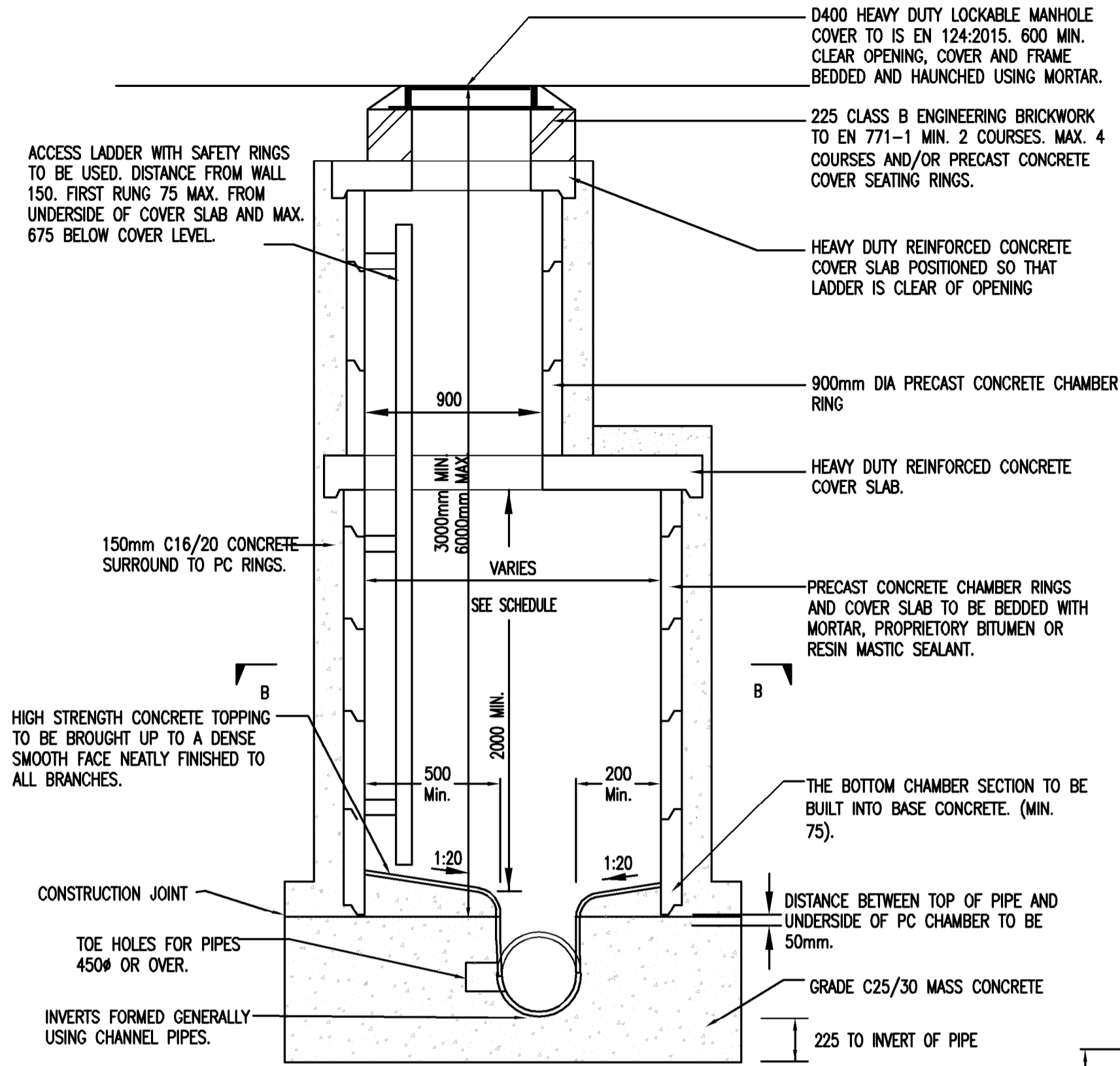


INLET DIA. (mm)	DROP DIA. (mm)
225	300
300	375
375	450
450	450
525	450
600	450
750	600
900	600

PRECAST CONCRETE RING MANHOLE DETAIL TYPE J (GSDS)

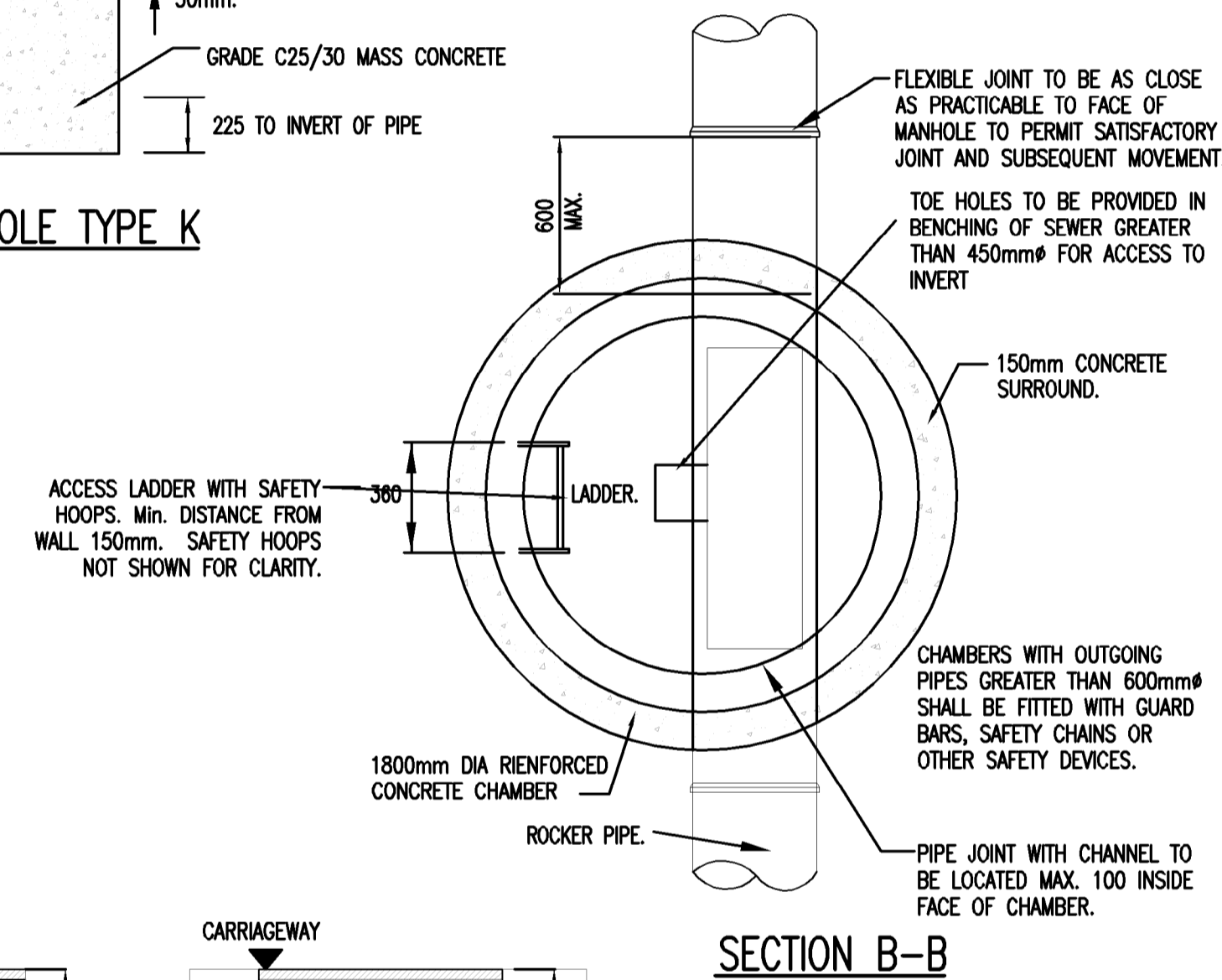


SCALE 1:25

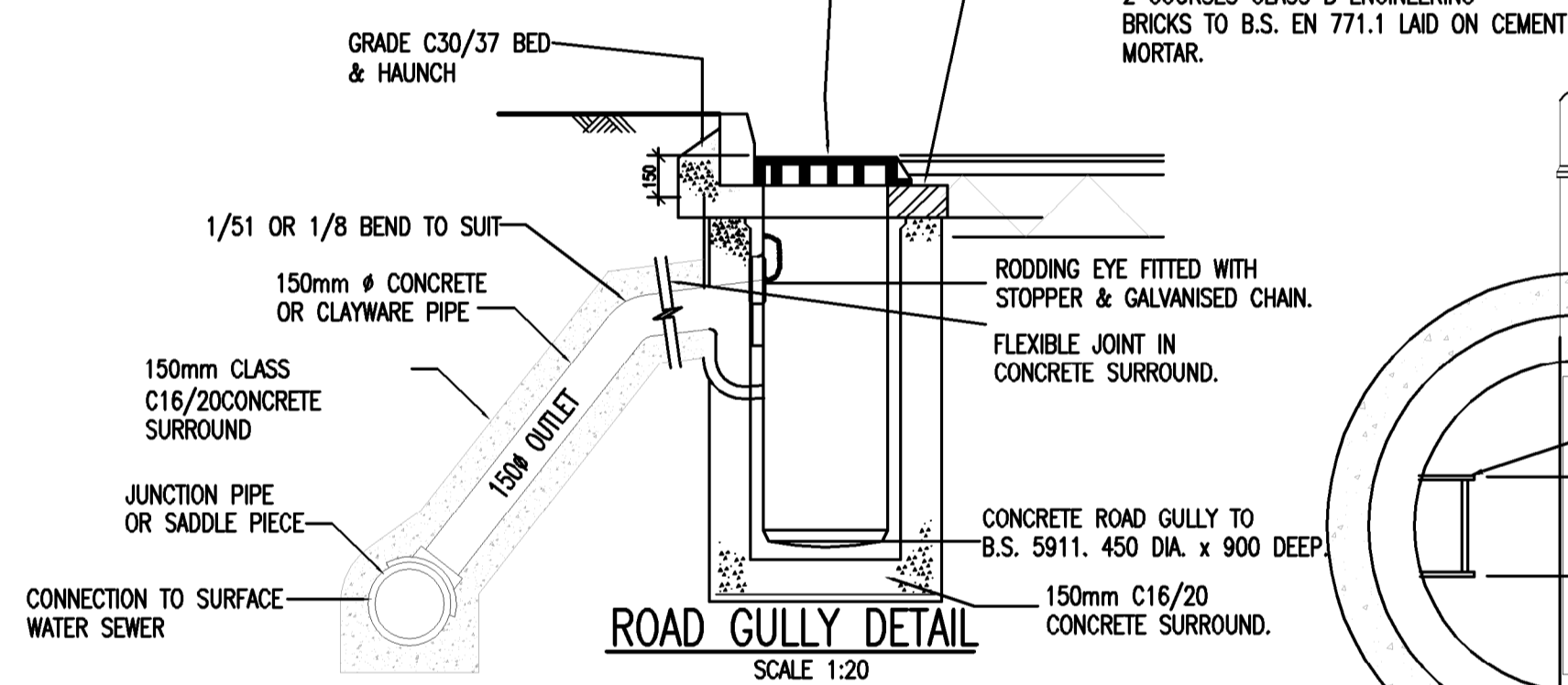


PRECAST CONCRETE RING MANHOLE TYPE K

SCALE 1:25

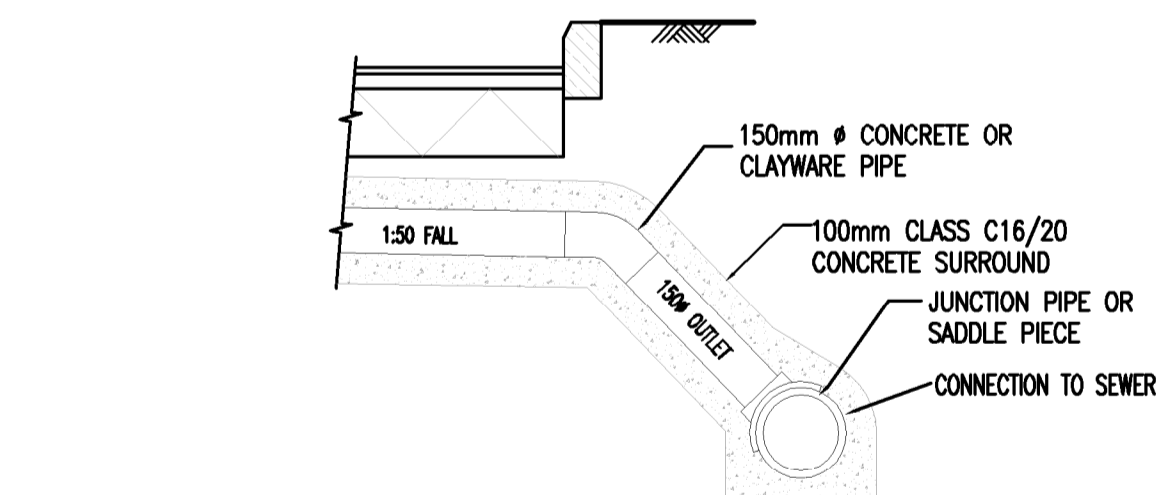


SECTION B-B



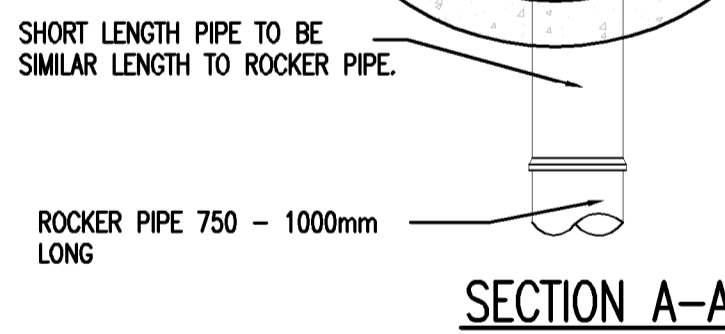
ROAD GULLY DETAIL

SCALE 1:20



TYPICAL SADDLE CONNECTION

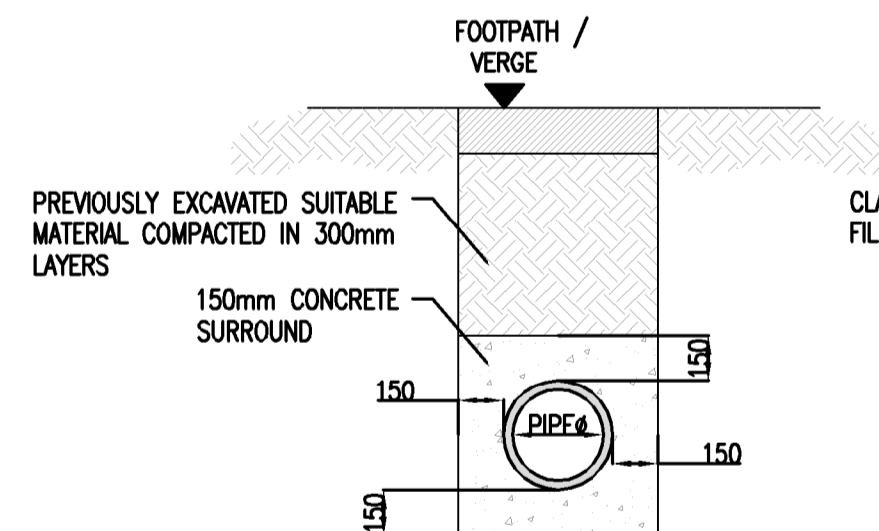
SCALE 1:25 @ A1



SECTION A-A

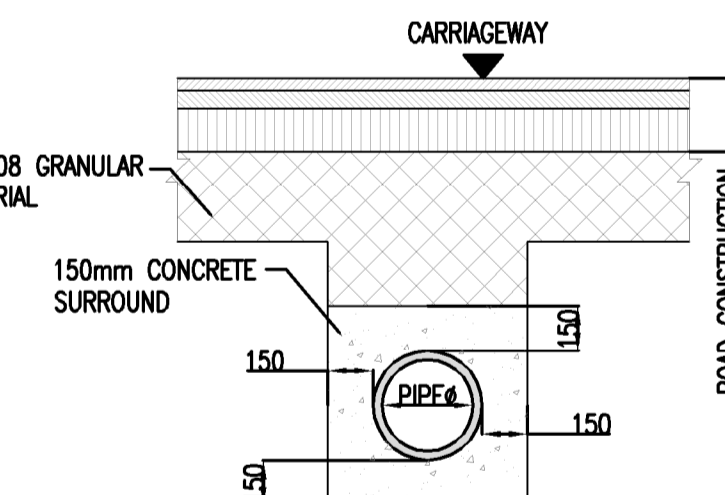
PIPE DIAMETER	ROCKER PIPE LENGTH
150 - 450	0.5 - 0.75
451 - 750	0.75 - 1.0
750 >	SEEK GUIDANCE

DIAMETER OF LARGEST PIPE IN MANHOLE	PRECAST CONCRETE RING SIZE
LESS THAN 375mm	1200mm DIA
375mm TO 450mm	1350mm DIA
450mm TO 700mm	1500mm DIA
750mm TO 900mm	1800mm DIA
950mm TO 1200mm	2100mm DIA
1250mm AND ABOVE	2400mm DIA



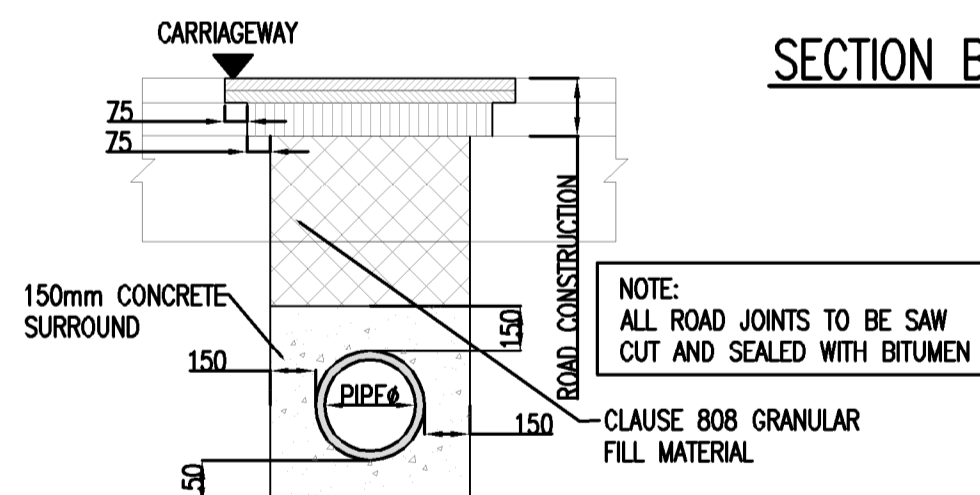
TYPICAL PIPE BEDDING DETAILS NON TRAFFICKED AREAS LESS THAN 900mm TO PIPE CROWN

SCALE 1:25



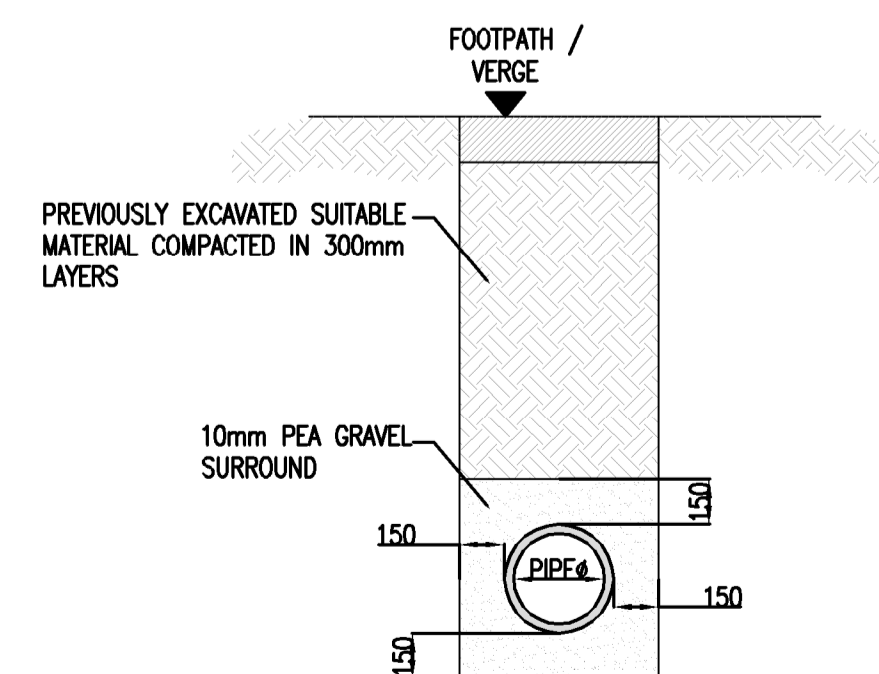
TYPICAL PIPE BEDDING DETAILS TRAFFICKED AREAS LESS THAN 1200mm TO PIPE CROWN

SCALE 1:25



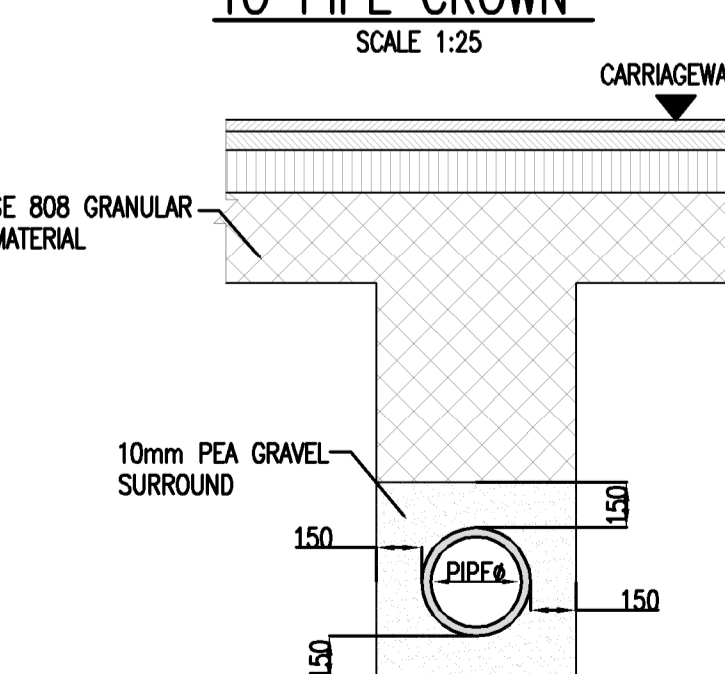
TYPICAL PIPE BEDDING AND REINSTATEMENT DETAILS TRAFFICKED AREAS (ROADWAY) LESS THAN 1200mm TO PIPE CROWN

SCALE 1:25



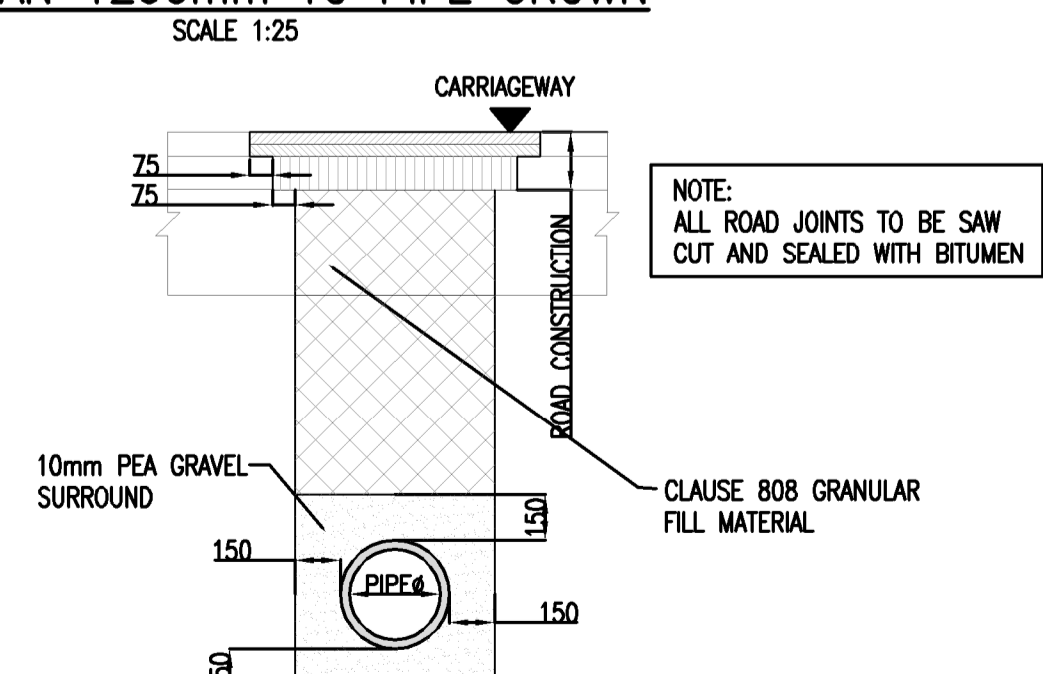
TYPICAL PIPE BEDDING DETAILS NON TRAFFICKED AREAS GREATER THAN 900mm TO PIPE CROWN

SCALE 1:25



TYPICAL PIPE BEDDING DETAILS TRAFFICKED AREAS GREATER THAN 1200mm TO PIPE CROWN

SCALE 1:25

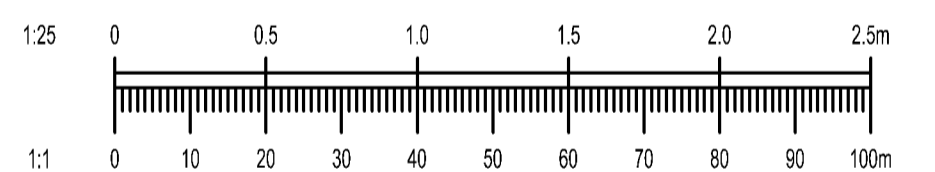


TYPICAL PIPE BEDDING AND REINSTATEMENT DETAILS TRAFFICKED AREAS (ROADWAY) GREATER THAN 1200mm TO PIPE CROWN

SCALE 1:25

NOTES:

- DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.
- TYPE A GRANULAR FILL SHALL CONSIST OF WASHED PEA GRAVEL. ALL MATERIAL SHALL PASS A 19mm B.S. SIEVE TEST AND SHALL BE RETAINED 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 EXCAVATED MATERIAL UNDER PAVED AREAS BACKFILL SHALL CONSIST OF SUITABLE APPROVED GRANULAR FILL. GENERAL BACKFILL SHALL BE COMPACTED IN LAYERS NOT EXCEEDING 300mm 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 0.9m IN OPEN SPACES AND FIELDS.
- ALL CONCRETE FOR PIPE BEDDING, HAUNCHING AND SURROUNDS SHALL BE GRADE 20N/20.
- ALL MANHOLES SHALL BE WATERTIGHT TO THE SATISFACTION OF THE ENGINEER.
- FORMWORK TO 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. 30/20 MASS CONCRETE FOUNDATIONS. 225 THICK PRECAST R.C. ROOF SLAB IN CL. 30/20 CONCRETE. COVER TO STEEL TO BE 40mm.
- TOE HOLES TO BE PROVIDED IN BENCHING OF SEWERS GREATER THAN 450mm DIAMETER FOR ACCESS TO INVERT. SAFETY CHAIN ON SEWERS 600mm. DIAM. OR GREATER MILD STEEL SAFETY CHAIN SHALL BE 10MM. NOMINAL SIZE GRADE M(H) NON CALIBRATED CHAIN, TYPE 1, COMPLYING WITH BS4942 PART 2.
- WHEN DEPTH OF MANHOLES TO INVERT IS GREATER THAN 3.5m, LADDERS SHALL BE USED INSTEAD OF RUNGS. FIXED LADDERS SHOULD MEET THE DIMENSIONAL REQUIREMENTS OF BS4211 EXCEPT THAT STRINGERS SHOULD NOT BE LESS THAN 65 X 20mm IN SECTION AND RUNGS 25mm IN DIAMETER.
- LADDER STRINGERS SHOULD BE ADEQUATELY SUPPORTED FROM THE MANHOLE WALL AT INTERVALS OF NOT MORE THAN 3.0m STRINGERS SHOULD BE BOLTED TO CLEATS TO FACILITATE RENEWAL.
- ALL LADDERS, RUNGS, HANDRAILS, SAFETY CHAIN, ETC. SHALL BE HOT DIPPED GALVANISED TO BS729.
- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF LOCAL COUNTY COUNCIL.



REV.	DATE	AMENDMENT	DRN	APPD

STATUS **FOR PLANNING ONLY NOT FOR CONSTRUCTION**

Waterman Moylan
Engineering Consultants
BLOCK 5, EASTPOINT BUSINESS PARK, ALFIE BYRNE ROAD, DUBLIN D03 H3F4 IRELAND.
Tel: (01) 664 8900 Fax: (01) 661 3618
Email: info@waterman-moylan.ie www.waterman-moylan.ie

CLIENT **ATLAS GP LIMITED**
ARCHITECT **MC CAULEY DAYE O'CONNELL**
PROJECT **CARMANHALL ROAD SHD 2022**
TITLE **PUBLIC SURFACE WATER DRAINAGE DETAILS**

DRAWN	DESIGNED	APPROVED	DATE
G.Byrne	BMC	JG	AUG. '22
SCALE	JOB NO.	DRG. NO.	REVISION
1:25 @A1	21-118	P231	