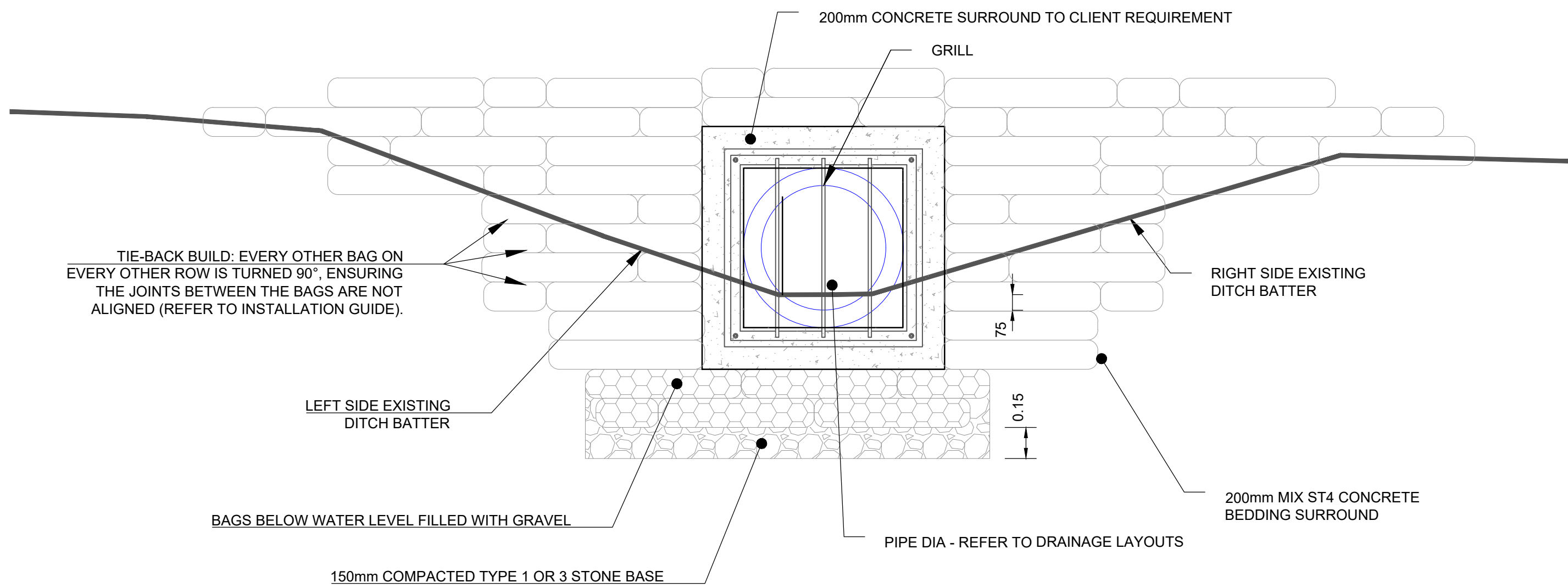
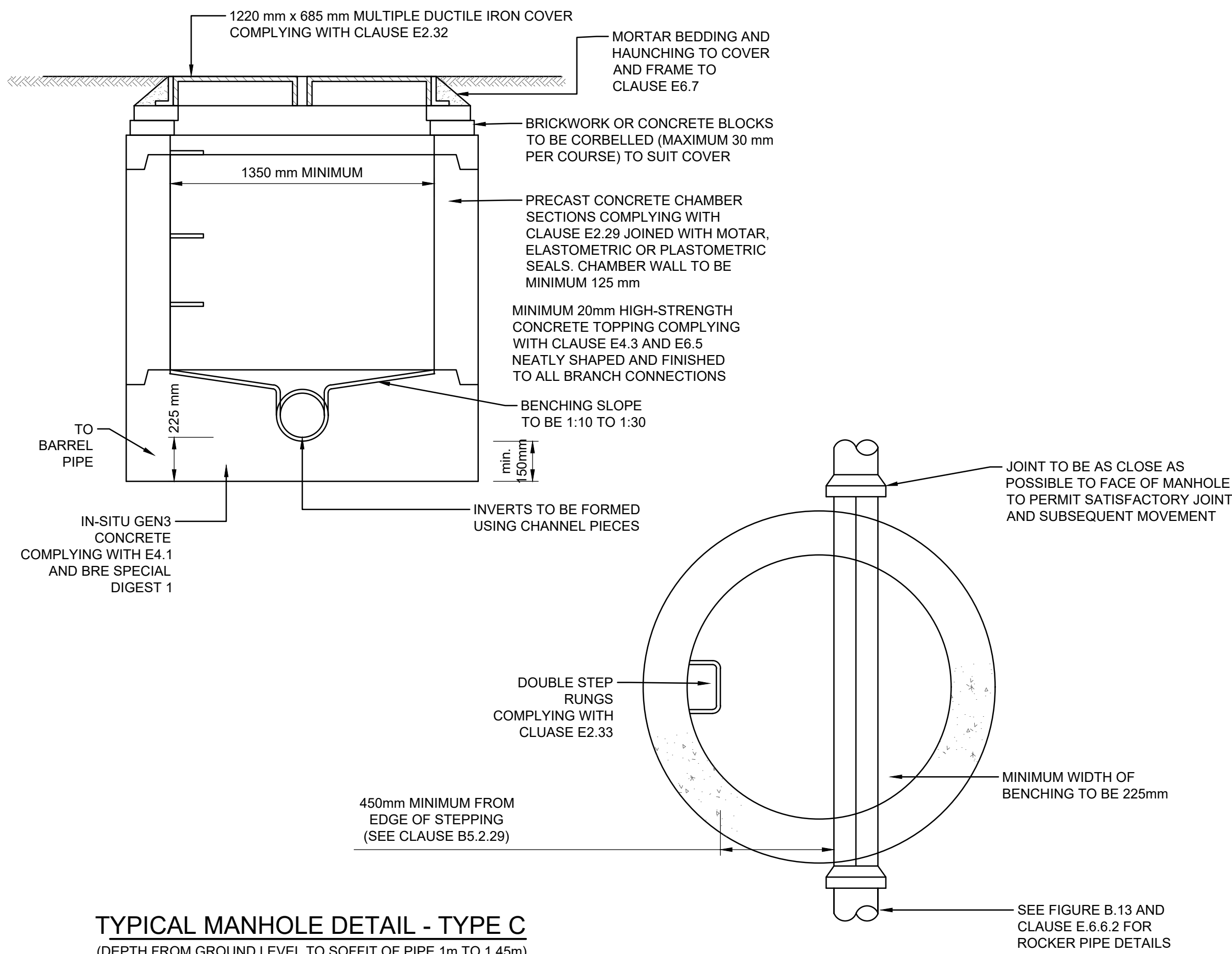
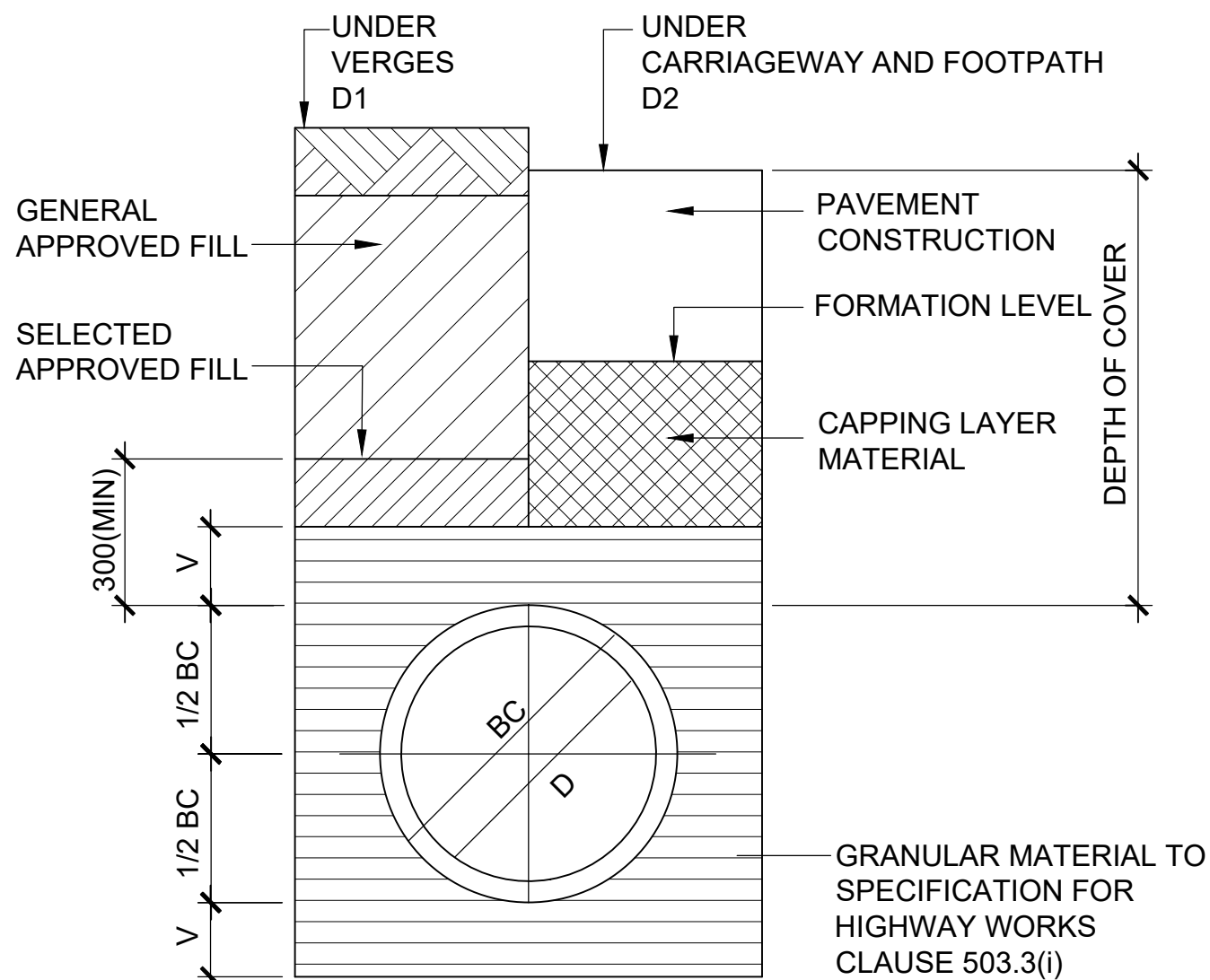




TYPICAL ROOTLOK HEADWALL
REFER TO ROOTLOK LITERATURE FOR SPECIFICATION



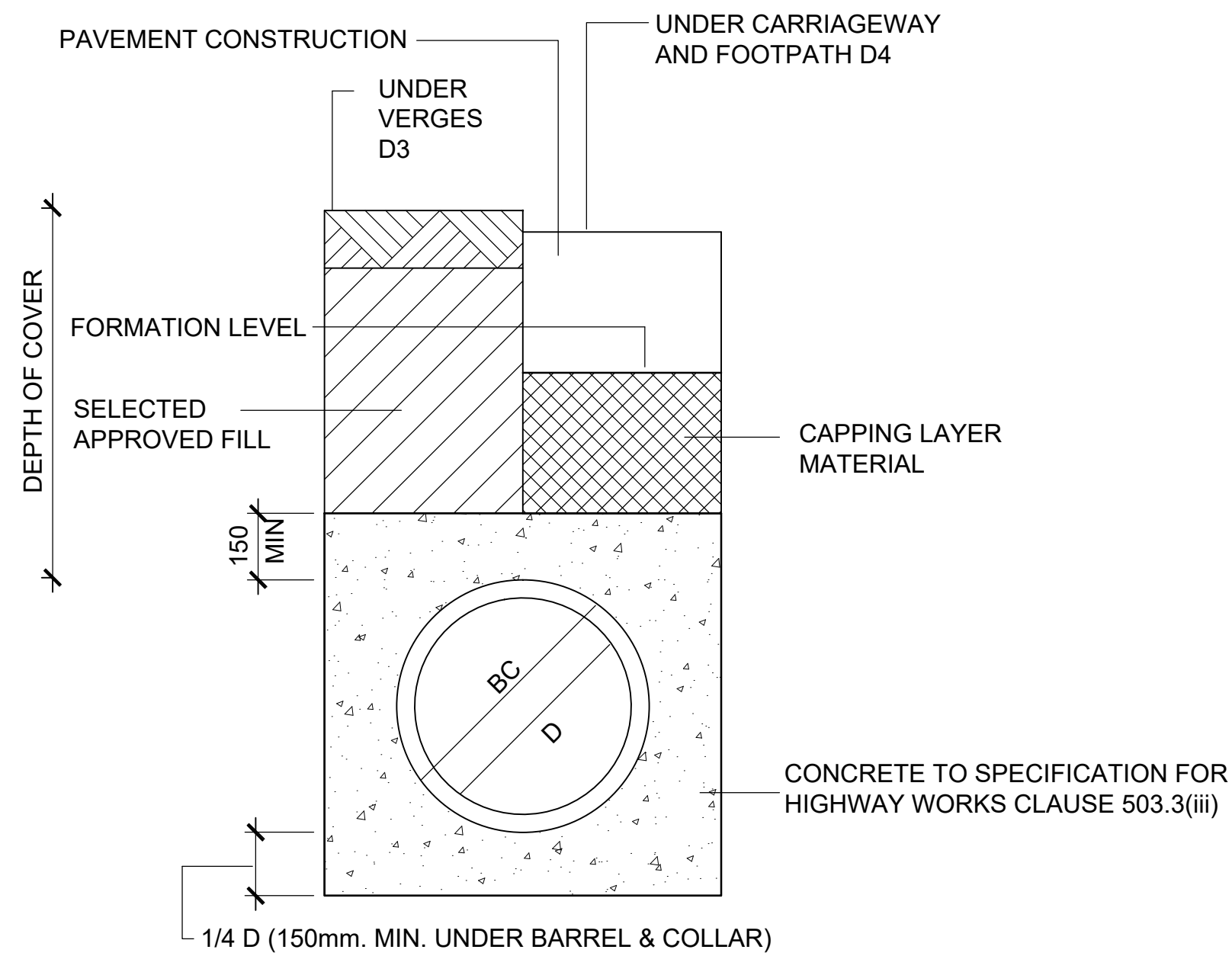
TYPICAL MANHOLE DETAIL - TYPE C
(DEPTH FROM GROUND LEVEL TO SOFFIT OF PIPE 1m TO 1.45m)



IN UNIFORM SOILS - V = 1/6 BC (150mm. MIN. UNDER BARREL & COLLAR)
IN MIXED SOILS CONTAINING IRREGULAR HARD SPOTS - V = 1/4 BC (200mm. MIN)

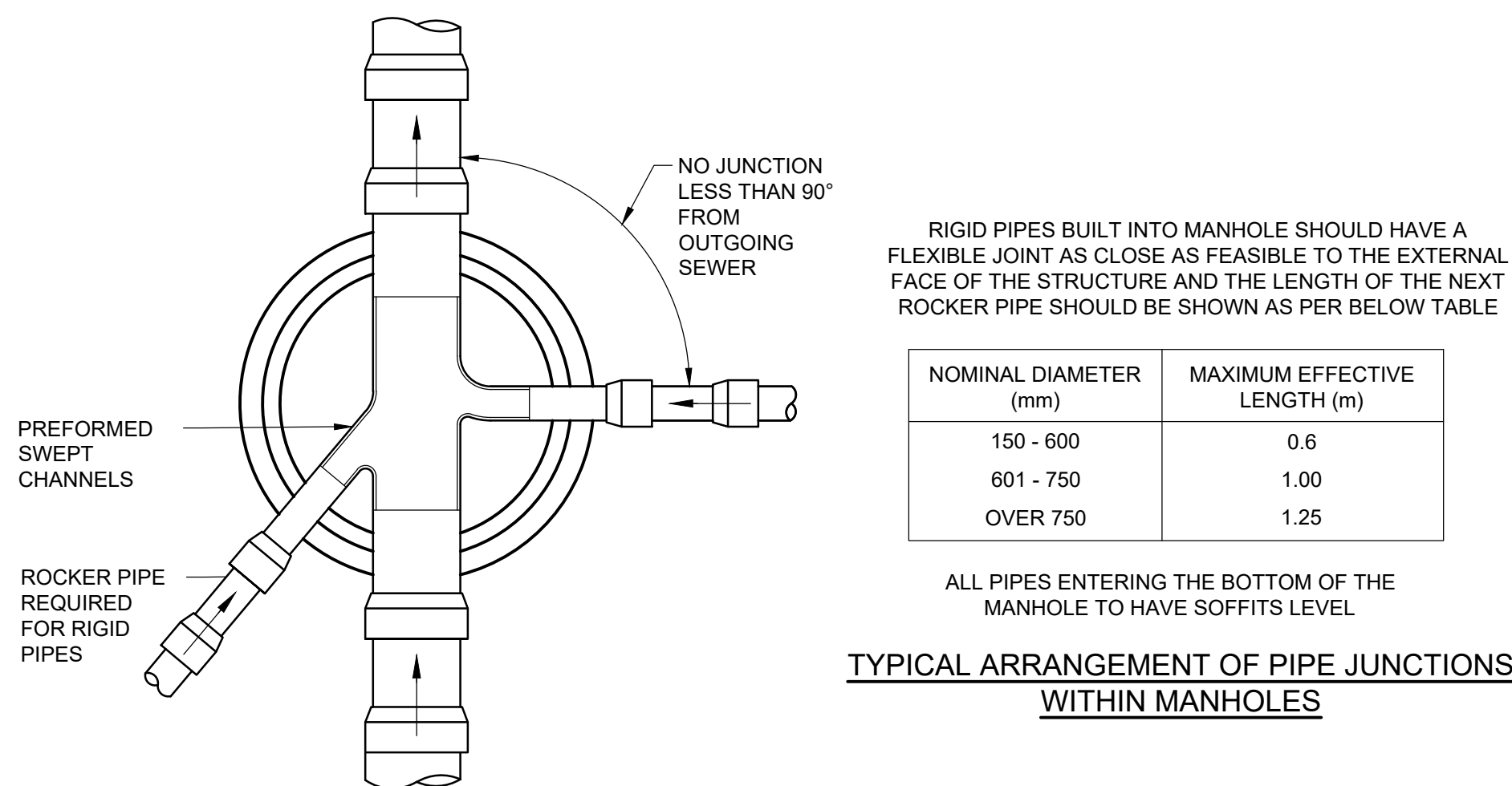
DESIGN D1 (UNDER VERGES AND DRIVEWAYS - >900 COVER)
DESIGN D2 (UNDER CARRIAGEWAYS - >1200 COVER)

BEDDING DETAIL - CLASS 'S'



DESIGN D3 (UNDER VERGES AND DRIVEWAYS - <900 COVER)
DESIGN D4 (UNDER CARRIAGEWAYS - <1200 COVER)

BEDDING DETAIL - CLASS 'Z'



RIGID PIPES BUILT INTO MANHOLE SHOULD HAVE A FLEXIBLE JOINT AS CLOSE AS FEASIBLE TO THE EXTERNAL FACE OF THE STRUCTURE AND THE LENGTH OF THE NEXT ROCKER PIPE SHOULD BE SHOWN AS PER BELOW TABLE

NOMINAL DIAMETER (mm)	MAXIMUM EFFECTIVE LENGTH (m)
150 - 600	0.6
601 - 750	1.00
OVER 750	1.25

ALL PIPES ENTERING THE BOTTOM OF THE MANHOLE TO HAVE SOFFITS LEVEL

TYPICAL ARRANGEMENT OF PIPE JUNCTIONS WITHIN MANHOLES

- NOTES**
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELATED DRAWINGS AND SPECIFICATIONS ISSUED BY THE ARCHITECT, ENGINEER, ANTLER HOMES SPECIFICATIONS AND NHBC STANDARDS.
 - IF THERE IS ANY AMBIGUITY BETWEEN THE SPECIFICATION AND THE DRAWINGS OR ANY OTHER DISCREPANCIES ARE FOUND THESE SHOULD BE REPORTED TO THE ENGINEER AND/OR CLIENT IMMEDIATELY SO THAT CLARIFICATION CAN BE SOUGHT PRIOR TO THE COMMENCEMENT OF WORK.
 - ANY SOFT SPOTS TO BE REMOVED AND REPLACED WITH TYPE 1 MATERIAL OR ENGINEER APPROVED MATERIAL.
 - DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
 - PIPE BEDDING GRANULAR MATERIAL - 50MM FOR SLEEVED PIPES AND 1/6 OUTSIDE PIPE DIA. OR 100MM WHICHEVER IS THE GREATER FOR SOCKET PIPES.
 - WHERE GROUND CONDITIONS DICTATE CONCRETE TO BE SULPHATE RESISTANT.
 - ALL PIPES ENTERING INSPECTION CHAMBER / MANHOLE OR OTHER STRUCTURE TO INCORPORATE ROCKER PIPES MIN. 600MM LONG AND FLEXIBLE JOINTS
 - DRAINS TO BE CONSTRUCTED UNDER DWELLINGS WITH SUSPENDED FLOOR SLABS SHOULD EITHER BE INSTALLED USING A PROPRIETARY HANGER SYSTEM WHERE "BEAM AND POT" OR SIMILAR CONSTRUCTION IS USED, OR SHOULD BE CAST INTO LOCAL SLAB THICKENING WHERE REINFORCED CONCRETE GROUND SLABS ARE TO BE POURED IN SITU.
 - PIPE LAYING IN MADE / SOFT GROUND WHERE THE TRENCH FORMATION HAS LITTLE BEARING STRENGTH AND THEREFORE WILL NOT SUPPORT PIPE BEDDING MATERIAL EFFECTIVELY. IT IS NECESSARY TO PROVIDE A STABLE FORMATION BEFORE PIPE LAYING. SUCH CONDITIONS MOST COMMONLY OCCUR IN PEAT, SILTY GROUND, SOFT TO VERY ALLUVIAL CLAYS, RUNNING SAND OR IN ARTIFICIALLY FILLED GROUND. THE TRENCH FORMATIONS AND MANHOLE BASE SHOULD BE OVER-EXCAVATED BY 600-800MM, DEPENDING ON THE BEARING STRENGTH OF THE GROUND. GRAVEL REJECT MATERIAL OR SMALL HARDCORE, LESS THAN 75MM, IS THEN COMPACTED IN LAYERS TO FORM A FIRM TRENCH BOTTOM. A 50MM THICKNESS OF LEAN-MIX CONCRETE IS THEN PLACED AS BINDING. THE PIPE IS THEN LAID ON GRANULAR BEDDING MATERIAL. THE PIPE BEDDING CONSTRUCTION REQUIREMENTS ARE CALCULATED IN THE NORMAL WAY, BUT IT IS IMPORTANT THAT 'WIDE TRENCH' DESIGN CRITERIA ARE USED BECAUSE 'NARROW TRENCH' CONDITIONS CANNOT BE GUARANTEED IN THIS SITUATION.

**FOR CONSTRUCTION -
SUBJECT TO APPROVAL**

C	ISSUE FOR CONSTRUCTION	EW	LG	BAC	14.03.25
B	DETAILS UPDATED TO REFLECT LATEST SITE DESIGN.	LG	SW	SW	08.08.24
A	DETAILS UPDATED TO LATEST ANTLER HOMES SITE LAYOUT AMENDMENTS	LG	SW	SW	22.02.24
Rev	Amendments	Dm	Chk	App	Date

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Job Title

**ST ANNE'S DRIVE
WOKINGHAM**

Drawing Title

**DRAINAGE CONSTRUCTION DETAILS
SHEET 3 OF 4**

Client

ANTLER HOMES

Scale	Date	Designed
1:20 @A1	JAN 24	LG
Drawn	Checked	Approved
RML	SW	SW
Job No	Drawing No	Rev
23-190	23-190-237	C