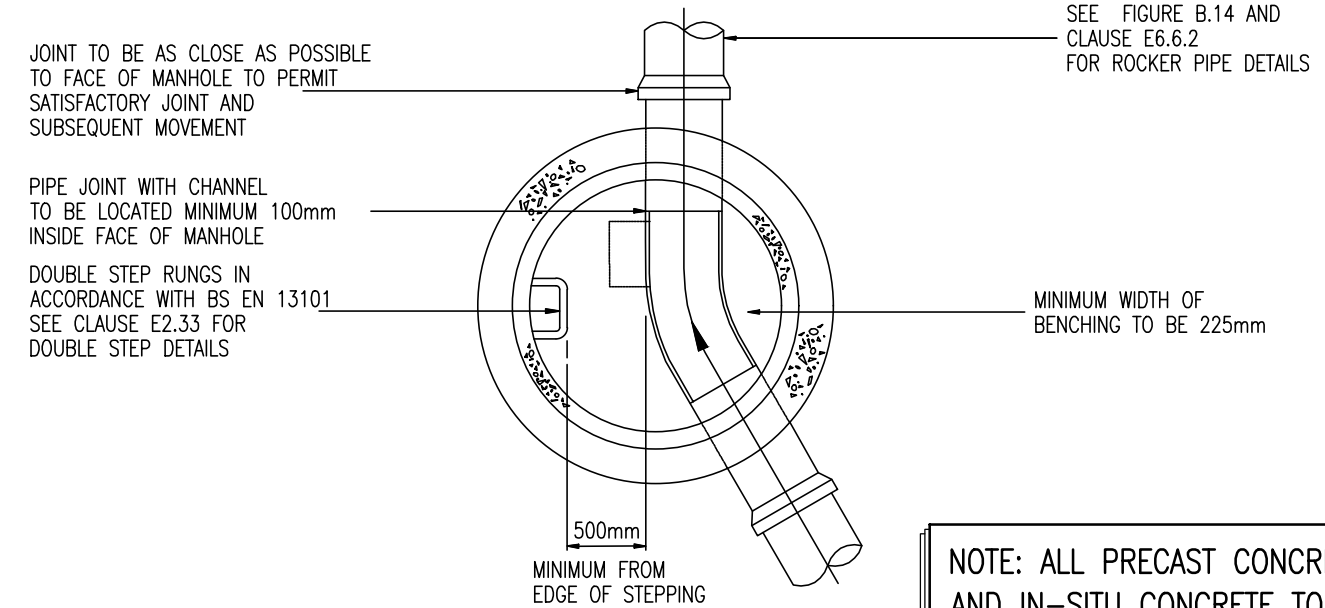
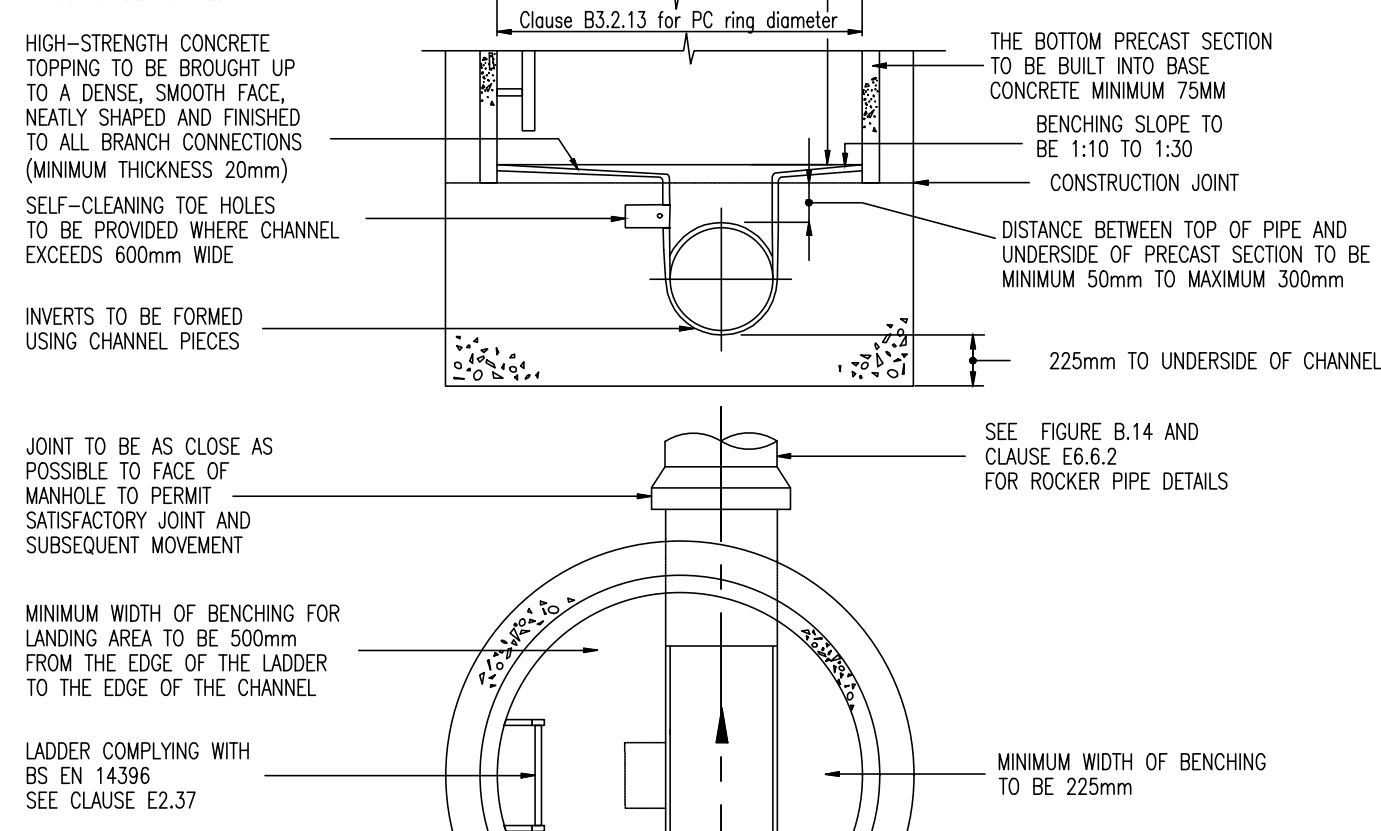


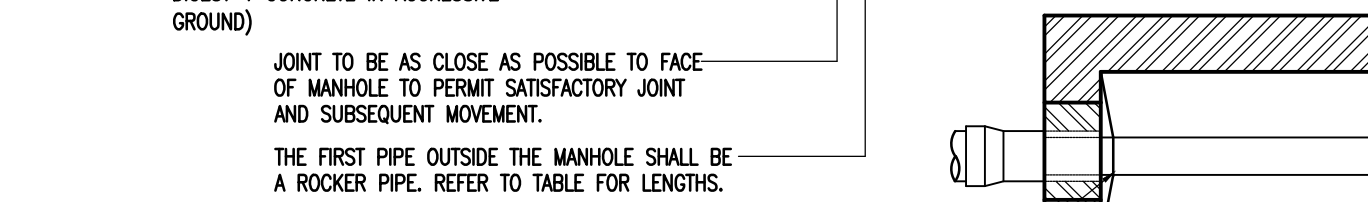
Maximum depth from cover level to soffit of pipe 3.0 m



TYPICAL MANHOLE DETAIL - TYPE 1A



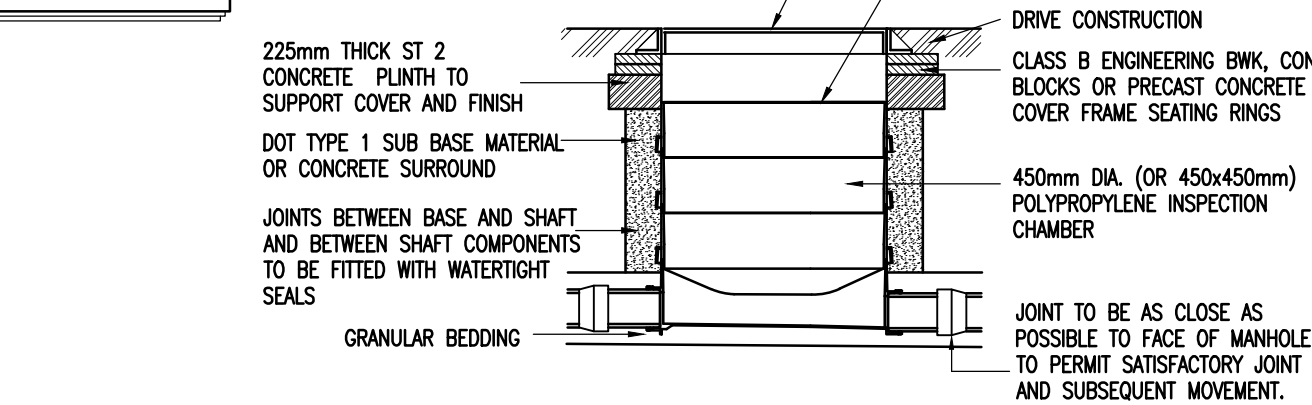
BRICKWORK OR CONC
BLOCKS TO BE CORBELLED
(MAX 30mm PER COURSE)
TO SUIT COVER



TYPICAL MANHOLE DETAIL - TYPE C

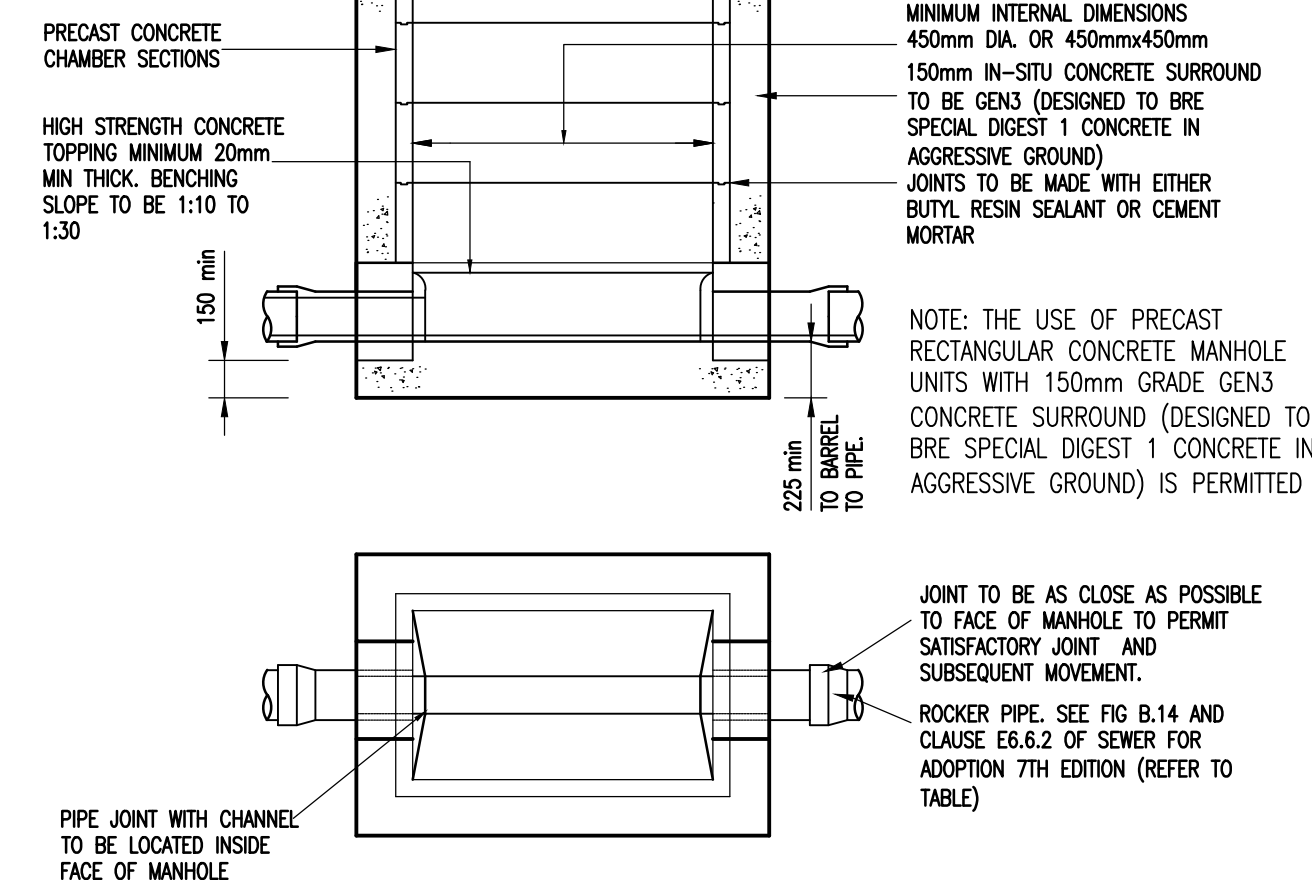
DIAMETER OF LARGEST PIPE MANHOLE (mm)	INTERNAL DIAMETER OF MANHOLE (mm)	NOMINAL DIAMETER (mm)	EFFECTIVE LENGTH (m)
LESS THAN 375	1200	150 - 600	0.60
375 - 450	1350	601 - 750	1.00
500-700	1500	OVER 750	1.25

NOTE: DIAMETER TO BE INCREASED BY ONE SIZE FOR MANHOLES WITH LARGE NUMBERS OF CONNECTIONS.



(FLEXIBLE MATERIAL DETAIL)

Depth from ground level to soffit of pipe Max. 3.0m for areas subject to vehicle loading, Non-entry



TYPICAL INSPECTION CHAMBER DETAIL – TYPE 3 (RIGID MATERIAL DETAIL)

Depth from ground level to soffit of pipe Max. 3.0m for areas not subject to vehicle loading or areas subject to light vehicle loading, non-entry

TYPICAL MANHOLE DETAILS WITHIN THIRD PARTY AREAS IN
ACCORDANCE TO SEWERS FOR ADOPTION 7th EDITION

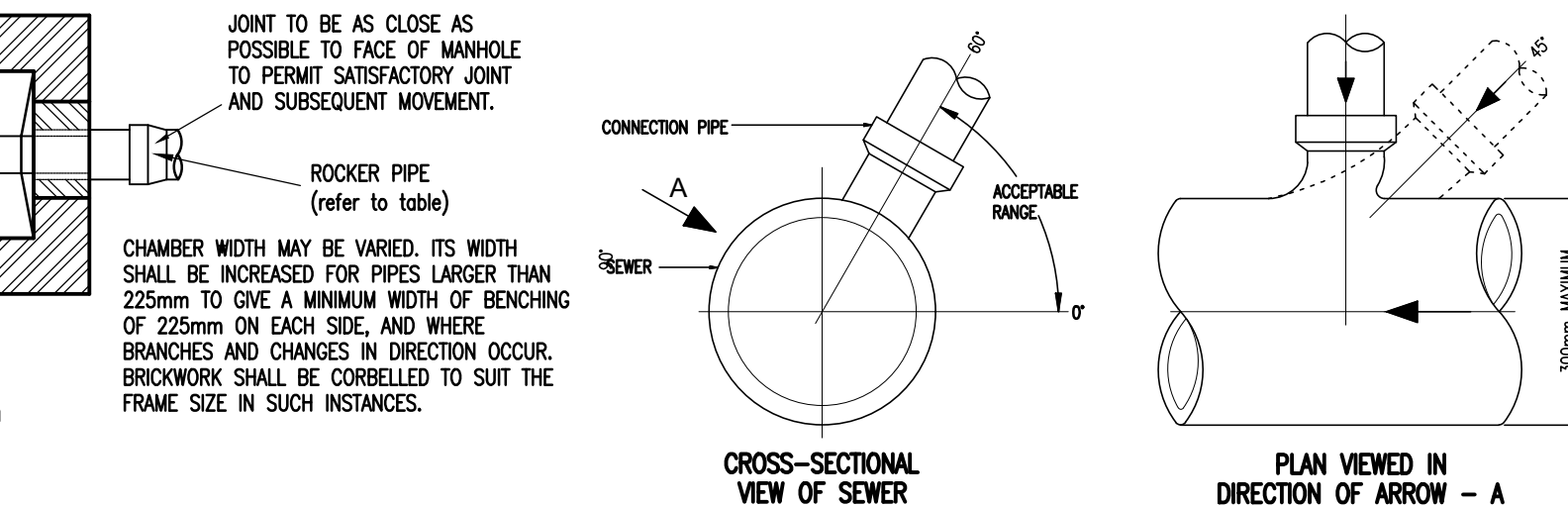
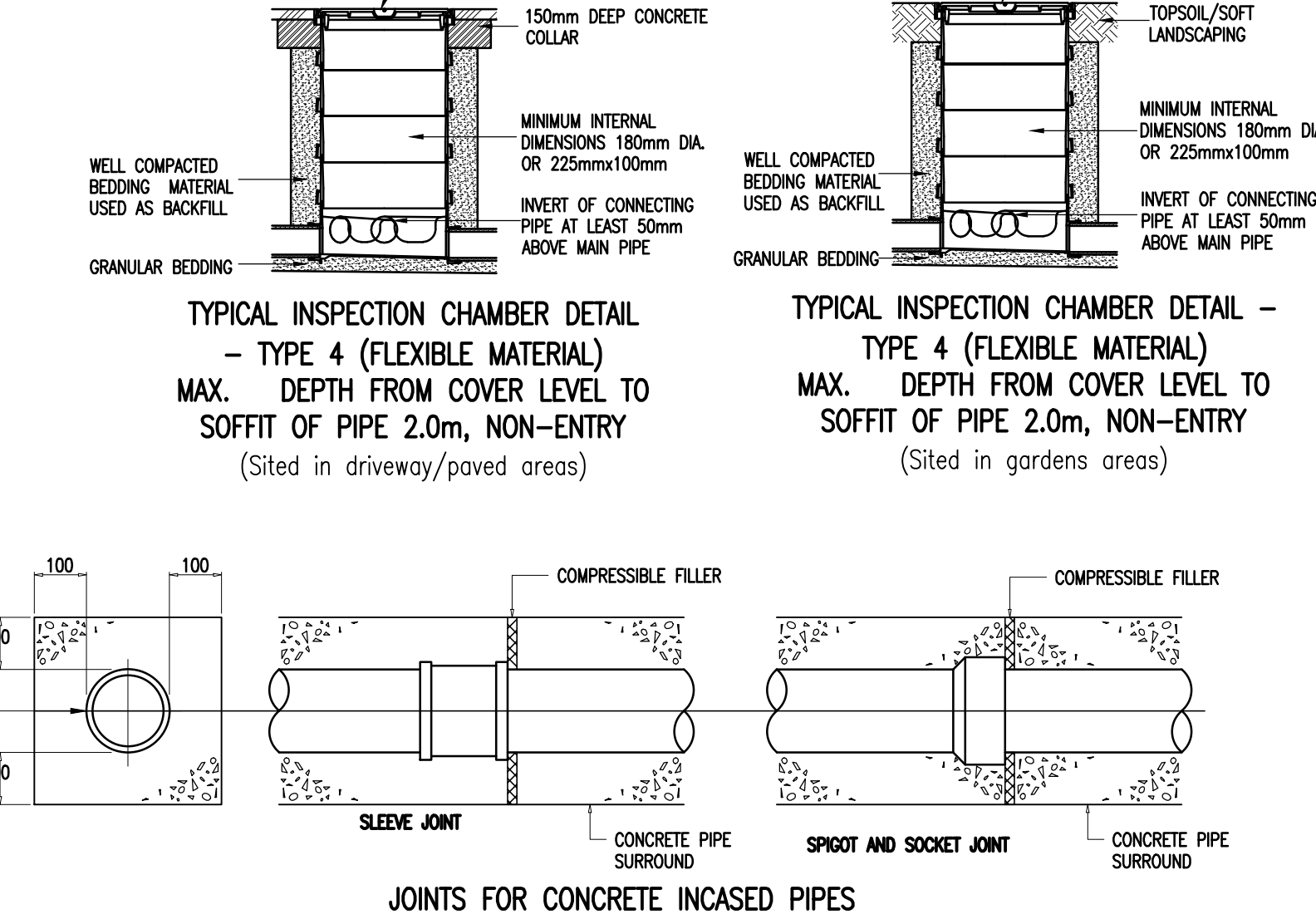


FIGURE B.24
CONNECTIONS TO SEWER



MIN. 900mm COVER

150 MIN

150° MIN

300

X

EXCAVATED BACKFILL

GEN 3 COVER WITH 2 A993 ME REINFOR COVER 1

GRANULAR BEDDING MATERIAL

150 MIN 150° MIN

150° MIN 150 MIN

CONCRETE SLAB PROTECTION PIPE
BEDDING DETAIL – SURFACE WATER
ONLY

NOTES:

1. * = 150 FOR PIPES DIAMETER UP TO 300mm,
* = 200mm FOR PIPE DIAMETERS OVER 300mm

BASED ON NARROW TRENCH THEORY: DESIGNER TO CONFIRM FOR SPECIFIC PIPELINE.

2. BACKFILL MATERIAL TO BE SELECTED EXCAVATED MATERIAL WHERE THIS MATERIAL COMPLIES WITH CESWI. ADDITIONAL MATERIAL TO MAKE UP ANY DEFICIENCY TO BE GRANULAR SUB-BASE TYPE 1 UNLESS STATED OTHERWISE.

3. IN WET, SOFT, OR SILTY SOILS, WHERE LATERAL SUPPORT IS NOT OBTAINABLE OR WHERE FINES MAY MIGRATE, THE GRANULAR BEDDING MATERIAL SHALL BE SURROUNDED BY GEOTEXTILE FABRIC WITH MIN 200 OVERLAP.

4. NOT ACCEPTABLE FOR USE ON SECTION 104 SITES.

5. TRENCH BACKFILL TO MEET HIGHWAY SPECIFICATION WHEN LAID IN ROAD FOOTPATH.

NOMINAL	AGGREGATE SIZE (mm)
---------	---------------------

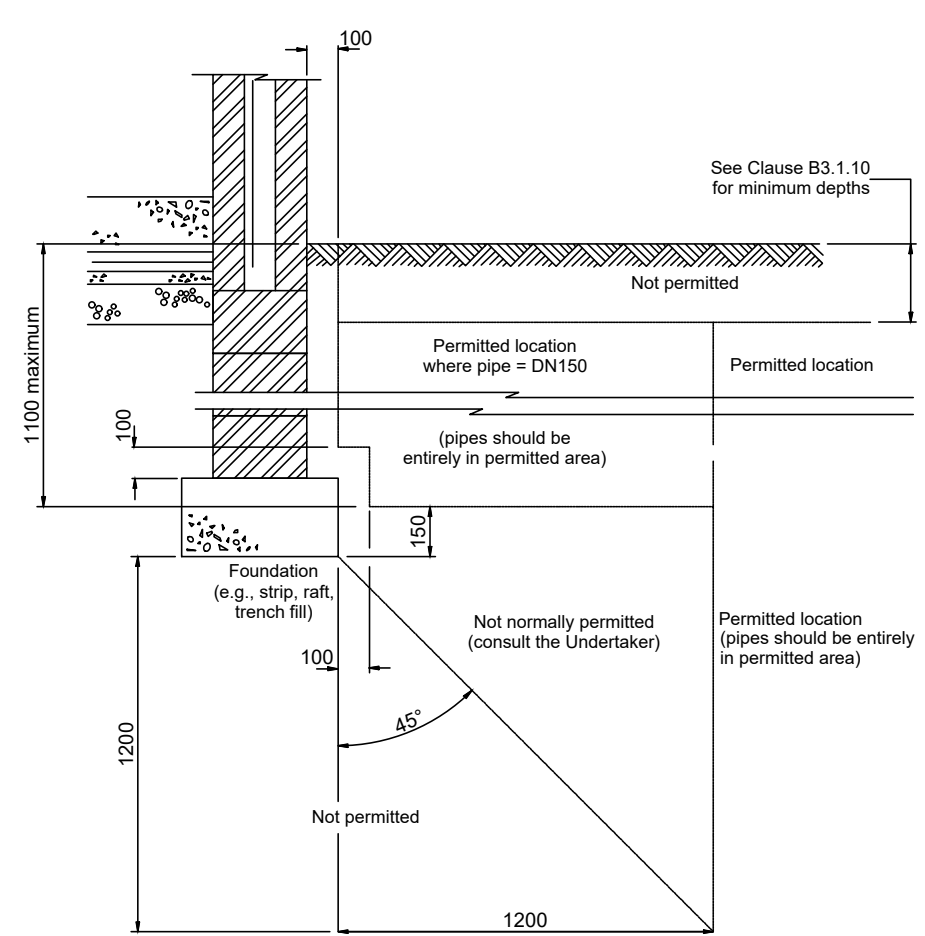
BORE OF PIPE (min)	SINGLE SIZED GRADED	
100	10	—
150	10 OR 14	14 TO 5
225-300	10,14 OR 20	14 TO 5 OR 20 TO 5
375-525	14 OR 20	14 TO 5 OR 20 TO 5
EXCEEDING 525	14,20 OR 40	14 TO 5 OR 20 TO 5 40 TO 5

525		40 TO 5
-----	--	---------

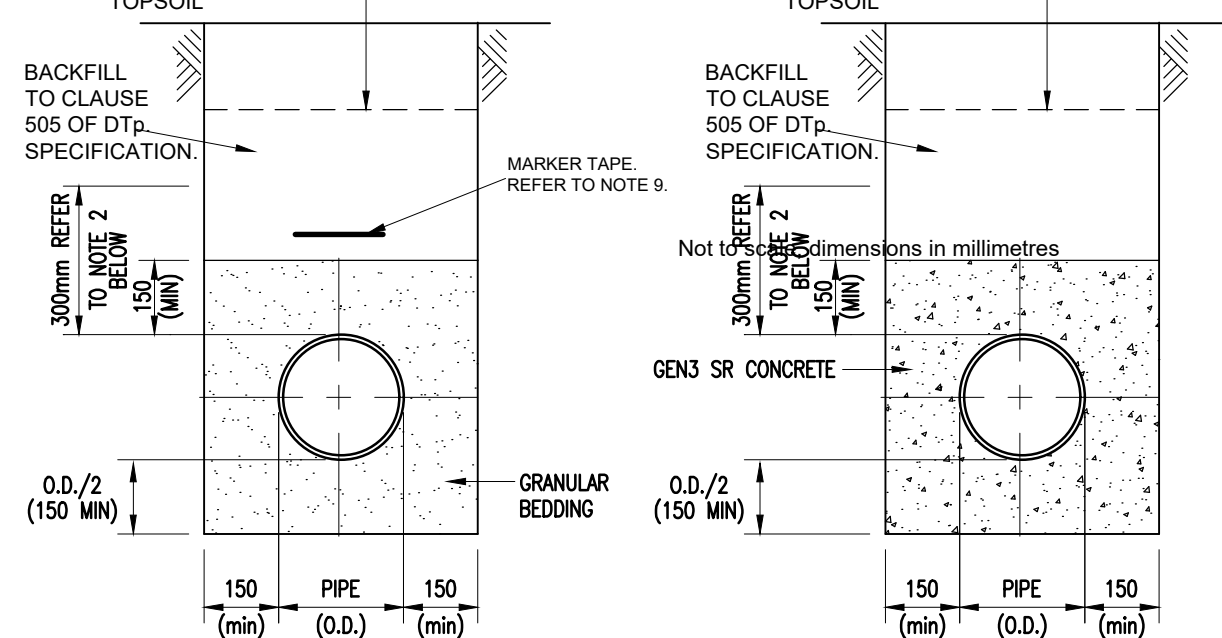
DIM X > 100mm FOR PIPES < 100mmØ

DIM X $\geq$ 150mm FOR PIPES $>$ 100mm ϕ
DIM X $\geq$ 200mm FOR PIPES/TRENCHES IN ROCK

FIGURE B.1
PERMITTED LOCATION OF SEWERS AND
LATERAL DRAINS IN PROXIMITY TO BUILDINGS



ROAD FORMATION, SUB-FORMATION OR UNDERSIDE OF ROAD OR UNDERSIDE OF TORSION



CLASS S GRANULAR

NOTES:

1. BEDDING BENEATH AND AT THE SIDES OF THE PIPE TO BE WELL COMPACTED
2. THE FIRST 300mm OF FILL ABOVE THE CROWN OF THE PIPE IS TO BE LIGHTLY TAMPED BY HAND.
3. MECHANICAL COMPACTATION MAY BE USED ONLY ABOVE THE LEVEL.
4. GEOTEXTILES MAY BE USED WHERE DIRECTED OR APPROVED BY THE ENGINEER TO CONTAIN BEDDING MATERIAL IN CERTAIN SOILS E.G. RUNNING SAND
5. IN VERY WEET CONDITIONS, WHERE DIRECTED OR APPROVED BY THE ENGINEER A TEMPORARY LAND DRAIN MAY BE LAID WITHIN THE GRANULAR BED.

CONCRETE

BEDDING DETAILS