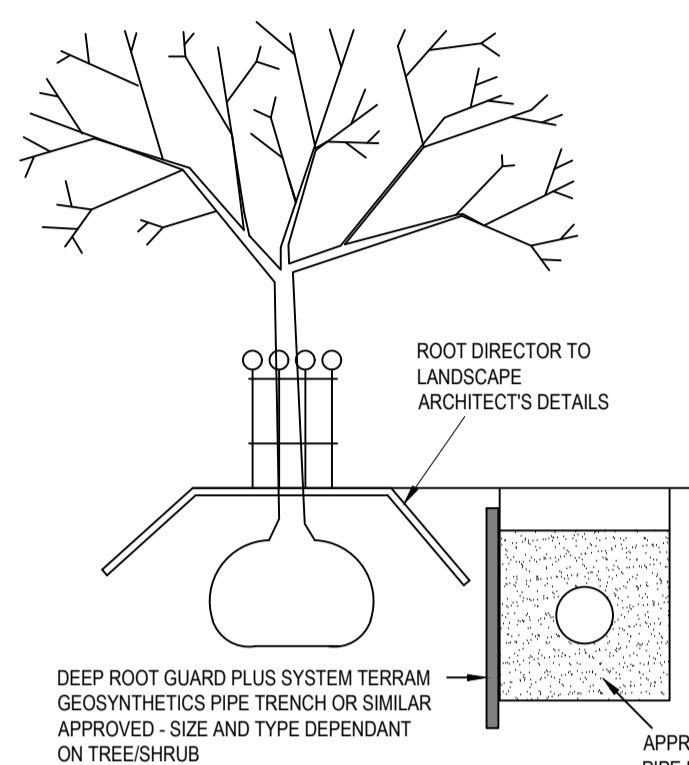
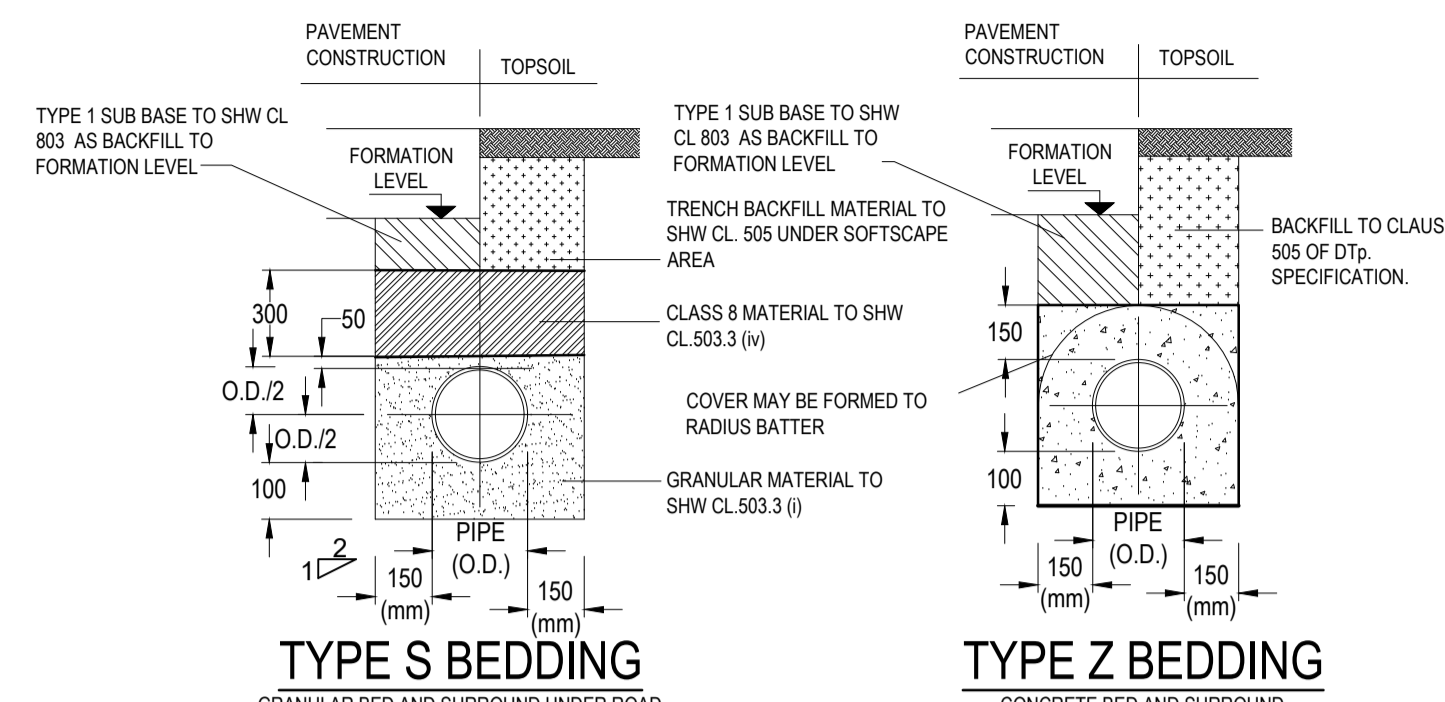


DETAIL 'X' AT EDGE OF LANDSCAPING



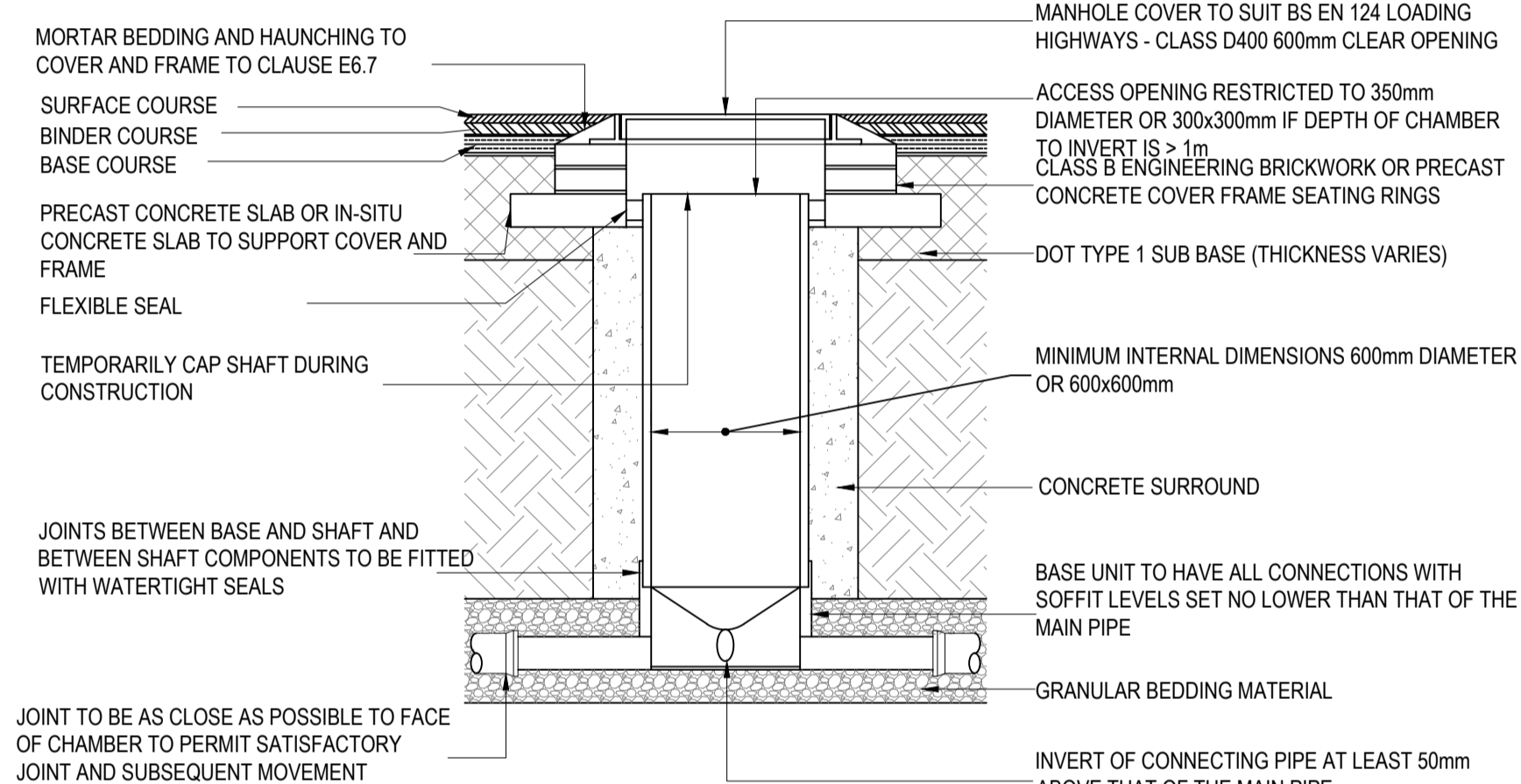
ROOT BARRIER DETAIL
FOR PROPOSED DRAINS WITHIN CLOSE PROXIMITY OF TREES/SHRUB ROOT ZONES



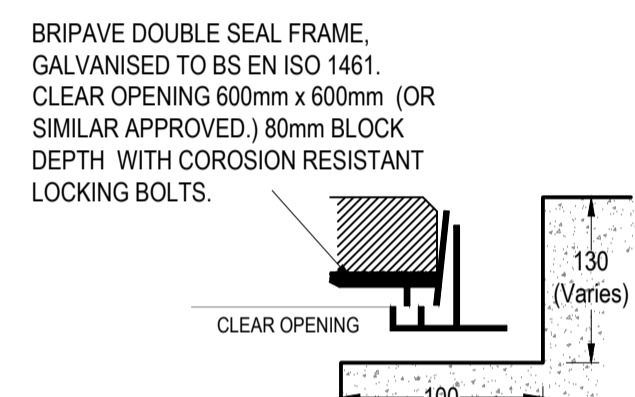
BEDDING DETAILS
SCALE 1:20

NOTES:
1. REFER TO SHW TABLE 93 AND SHW TABLE 61
2. BEDDING BENEATH AND AT SIDES OF THE PIPE TO BE WELL COMPACTED IN ACCORDANCE WITH CL 505
3. CONCRETE CRADLES AND ARCHES MAY BE EXTENDED TO THE SIDES OF THE TRENCH
4. GEOTEXTILES MAY BE USED WHERE DIRECTED OR APPROVED BY THE ENGINEER TO CONTAIN BEDDING MATERIAL IN CERTAIN SOILS EG. RUNNING SAND.
5. IN VERY WET CONDITIONS, WHERE DIRECTED OR APPROVED BY THE ENGINEER A TEMPORARY LAND DRAIN MAY BE LAID WITHIN THE GRANULAR BED.

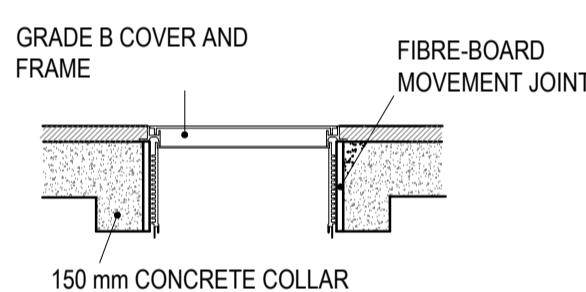
NOTES: (TYPE Z ONLY)
6. WHERE PIPES WITH FLEXIBLE JOINTS ARE USED, THE 6. CONCRETE PROTECTION IS TO BE INTERRUPTED OVER ITS FULL CROSS SECTION AT INTERVALS NOT EXCEEDING 5 METRES (OR AS DIRECTED BY THE ENGINEER) BY A SHAPED FORMER OF BITUMEN IMPREGNATED COMPRESSIBLE FILLER. THESE INTERRUPTIONS SHALL CONCORD WITH PIPE JOINTS. SEE DIMENSIONS FOR PIPE BEDDING TABLE FOR THICKNESS OF COMPRESSIBLE FILLER.
7. CONCRETE TO BE FND4 WHERE FLEXIBLE PIPES ARE USED. CARE MUST BE TAKEN TO PREVENT THE PIPES FROM FLOATING.



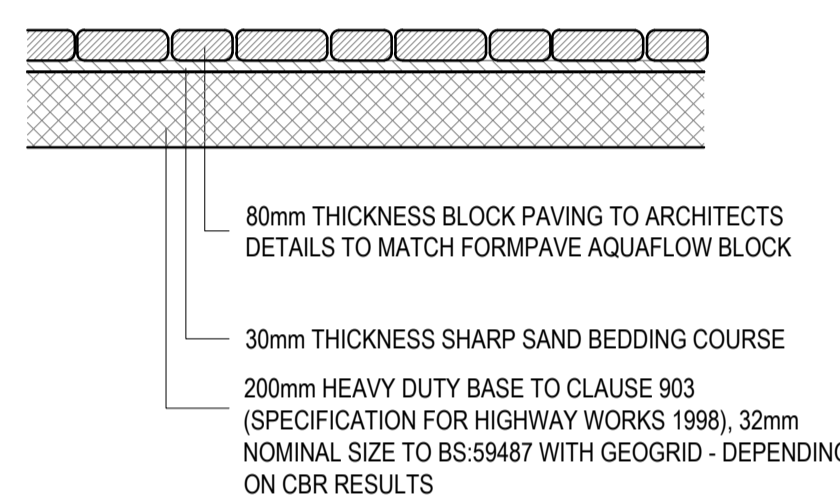
TYPICAL INSPECTION CHAMBER
DETAIL - TYPE 3
(FLEXIBLE MATERIAL DETAIL)



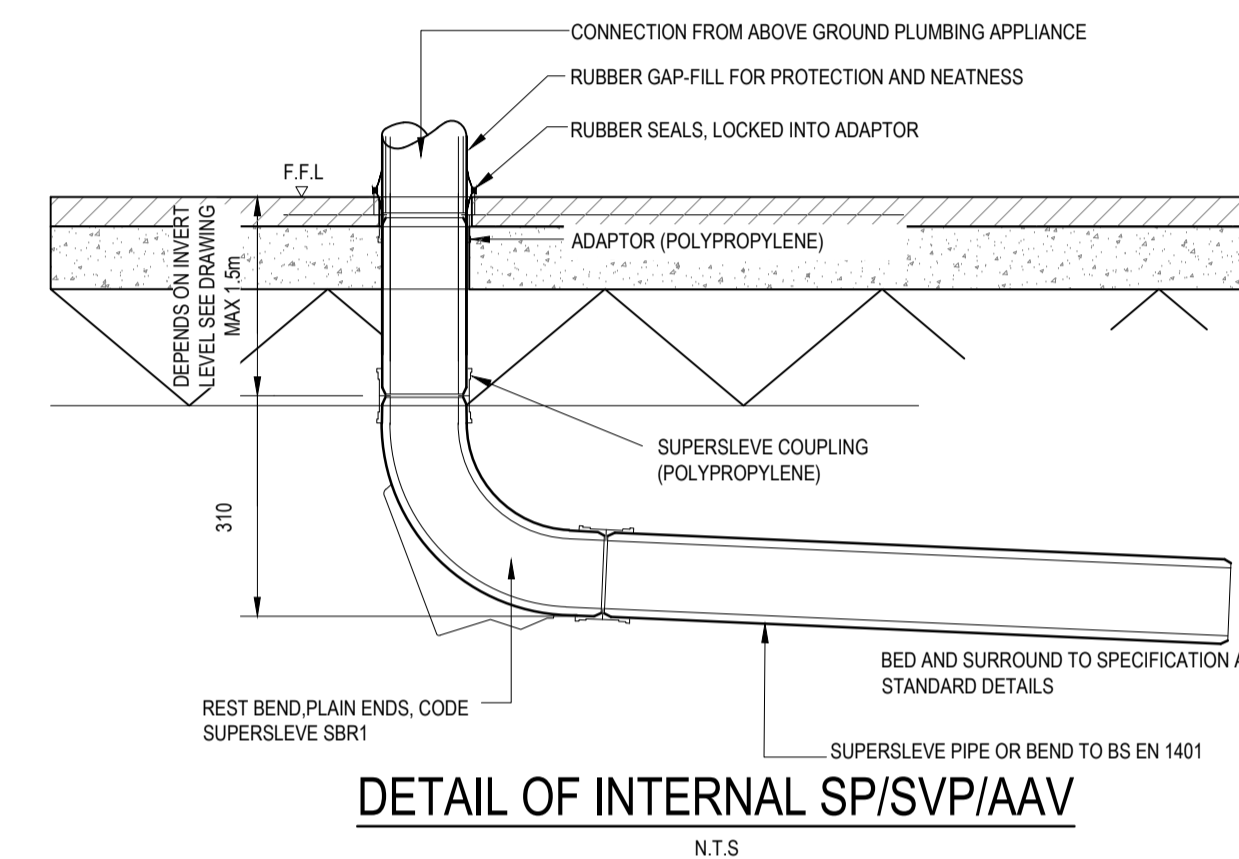
EXTERNAL RECESSED
COVER AND FRAME
CONTACT STEELWAY BRICKHOUSE TO CONFIRM TYPE OF
BLOCK BEING INSTALLED TO CONFIRM DEPTH.



COVER DETAIL WITHIN PAVED AREAS

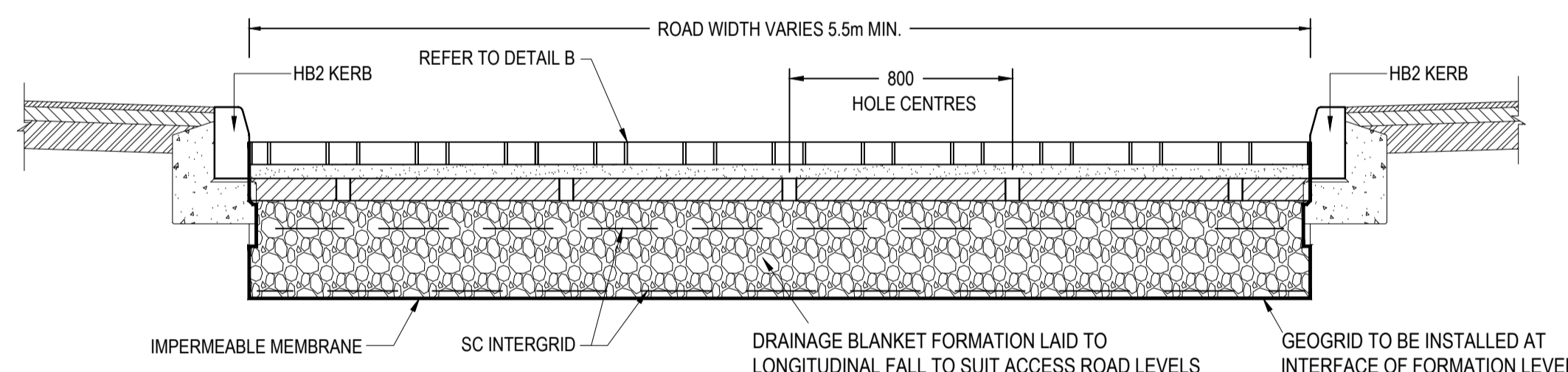


SERVICE CORRIDOR
CONSTRUCTION DETAIL
SCALE: 1:20

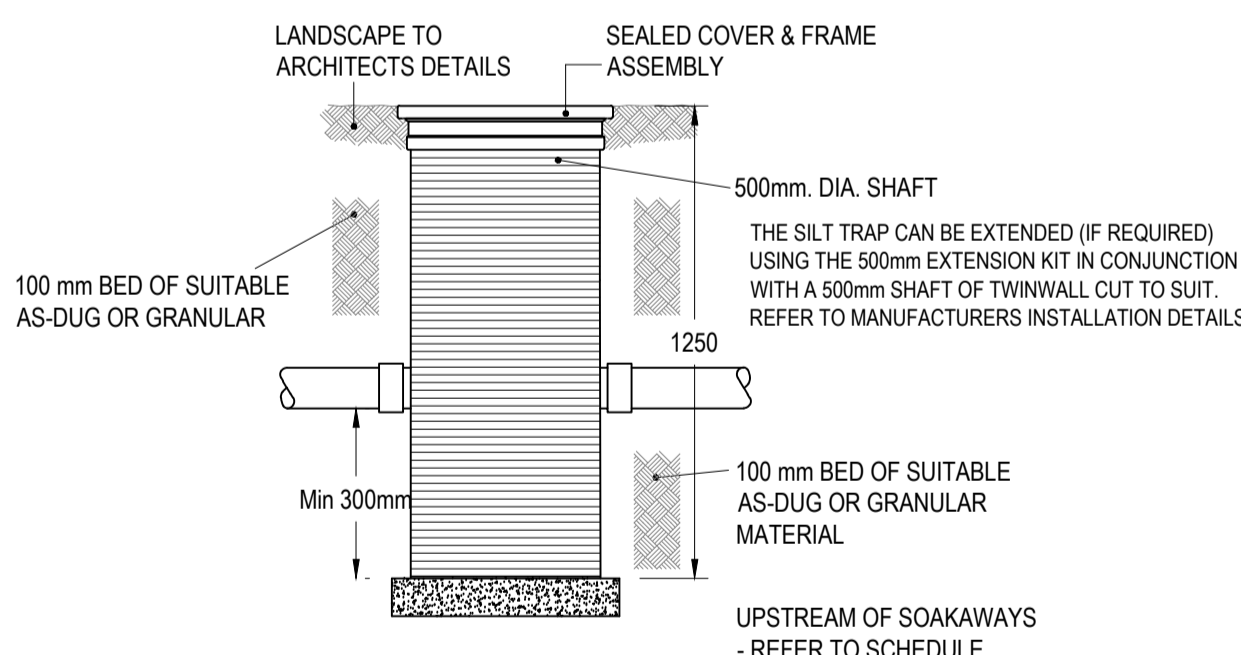


DETAIL OF INTERNAL SP/SVP/AAV
N.T.S.

LAY SC MEMBRANE, INTERGRID, 450mm OF SUB-BASE & SC INTERGRID.
LAY 80mm OF DENSE BASE COURSE DENSE BITUMEN MACADAM (DBM) TO BS4987 OVER SUB-BASE.
FOLLOWING CONSTRUCTION WORKS
CLEAN THE DENSE BITUMEN MACADAM (DBM) SURFACE.
CUT 20/35mm DIAMETER HOLES @800 CENTRES THROUGH THE DBM SURFACE INTO THE SUB-BASE.
FILL HOLES WITH 2-6mm CLEAN STONE.
LAY INBITEX, 50mm LAYING COURSE AND AQUAFLOW BLOCKS.



DETAIL E
PERMEABLE ROAD DETAIL
(WITH RUNNING SURFACE)

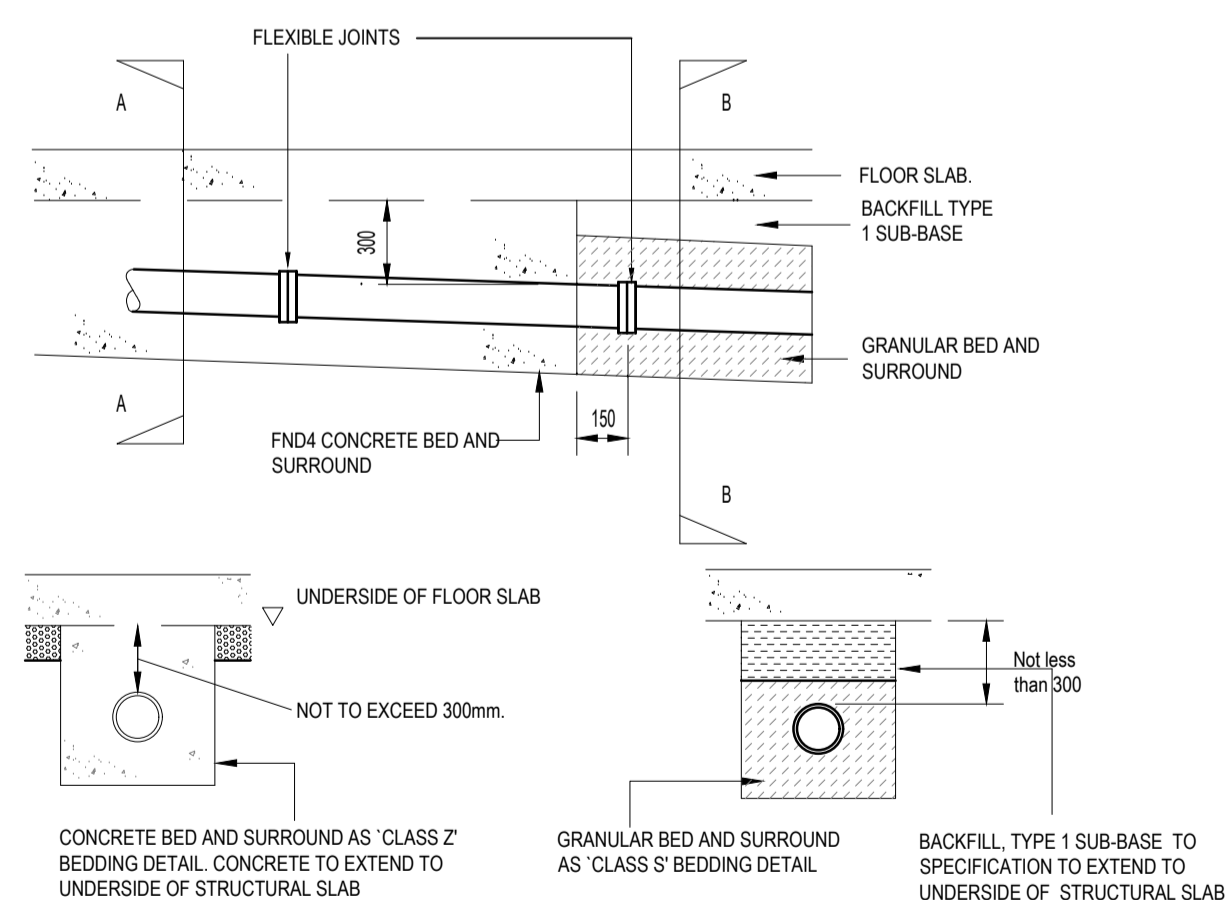


TYPICAL UPVC SILT TRAP
CHAMBER INSTALLATION
SCALE 1:20

PIPE DIA.	ROCKER PIPE LENGTH
150 - 600	0.60m

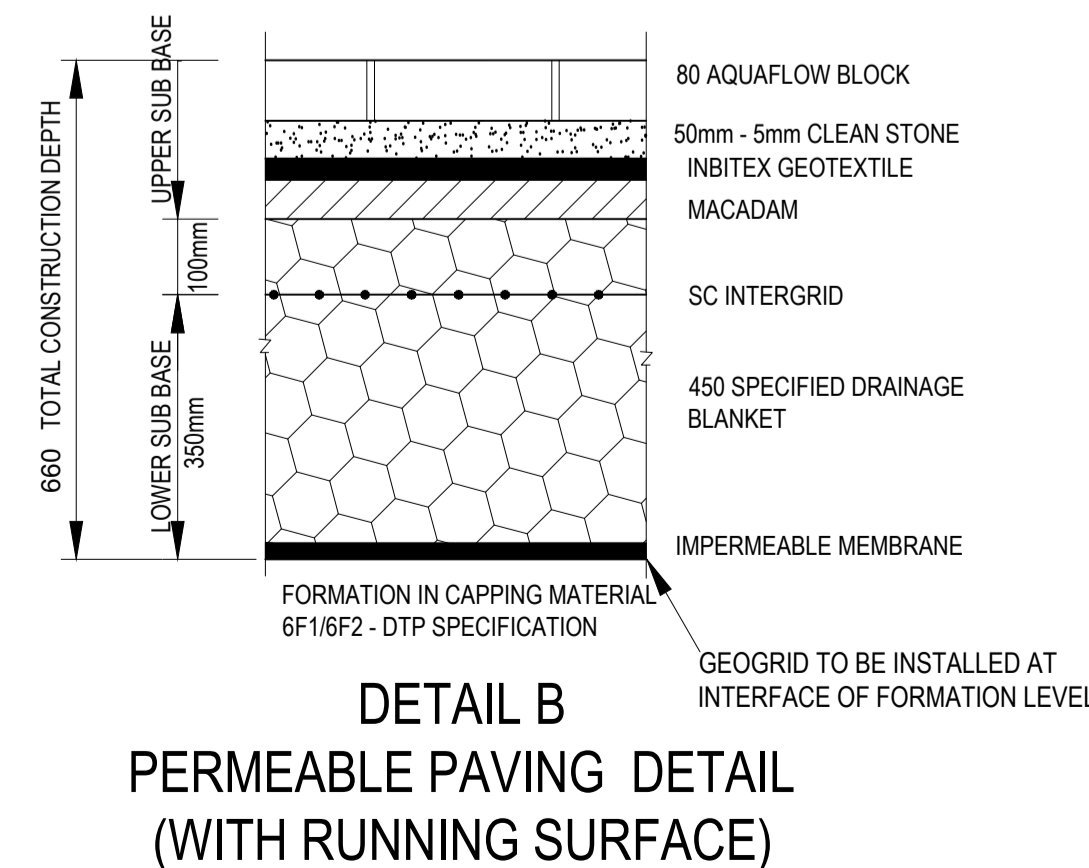
ROCKER PIPE DETAILS FOR INSPECTION
CHAMBERS, MANHOLES & CATCHPITS

DRAINAGE CHANNEL NOTES:
1. DRAINAGE CHANNELS TO BE ACO QMAX LINEAR DRAINAGE AS SUPPLIED BY ACO POLYMER PRODUCTS LTD. EQUAL OR SIMILAR APPROVED BY VALE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' INSTRUCTIONS.
2. FOUNDATION FOR CHANNELS TO BE LAID ON A ROLLED SUB-BASE LAYER OF 100mm MINIMUM THICKNESS.
3. DRAINAGE CHANNELS ARE TO BE INSTALLED WITH SPECIFIC MANUFACTURERS INSTALLATION GUIDE FOR UNIT SPECIFIED. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.



SECTION A-A SECTION B-B
DETAIL PIPE UNDER GROUND FLOOR SLAB

NOTES:
SCALE 1:20
1. CONCRETE BED AND SURROUND SHALL BE PROVIDED AS SECTION A-A WHERE DISTANCE BETWEEN UNDERSIDE OF SLAB AND PIPE SOFFIT IS LESS THAN OR EQUAL TO 300mm.
2. WHERE PIPES WITH FLEXIBLE JOINTS ARE USED THE CONCRETE PROTECTION SHALL BE INTERRUPTED OVER ITS FULL CROSS-SECTION AT EACH JOINT BY A SHAPED COMPRESSIBLE FILLER. (SEE DIMENSIONS FOR PIPE BEDDING TABLE FOR THICKNESS OF COMPRESSIBLE FILLER). IF PIPES ARE SURROUNDED IN CONCRETE, THE JOINTS SHALL BE PROTECTED FROM THE INGRESS OF CONCRETE BY WRAPPING THEM WITH TWO COATS OF MASTIC BANDAGE TAPE.



DETAIL B
PERMEABLE PAVING DETAIL
(WITH RUNNING SURFACE)

GRADING OF GRANULAR LOWER SUB BASE MATERIAL	
SIEVE SIZE	% PASSING
100mm	100
63mm	90-100
37.5mm	60-80
20mm	15-30
10mm	0-5

SUB-BASE SPECIFICATION FOR DRAINAGE BLANKET
THE GRANULAR SUB-BASE MATERIAL SHALL CONSIST OF CRUSHED GRAVEL, ROCK OR CONCRETE POSSESSING WELL DEFINED EDGES. IT MUST BE SOUND, CLEAN, NON-FRIABLE & FREE FROM CLAY OR OTHER DELETERIOUS MATTER. THE MATERIAL MUST BE NON-PLASTIC WHEN TESTED IN ACCORDANCE WITH BS-1377.
THE MATERIAL MUST HAVE A MINIMUM 10% FINE VALUE OF 150kN WHEN TESTED IN ACCORDANCE WITH BS-812 PART 3.
THE SELECTED TEST SAMPLES SHALL NOT BE OVEN DRIED AND SHOULD BE SOAKED IN WATER AT ROOM TEMPERATURE FOR 48 HOURS BEFORE TEST.

- GENERAL NOTES:
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
 - ALL LEVELS ARE SHOWN IN METRES UNLESS NOTED OTHERWISE.
 - DO NOT SCALE FROM THE DRAWING. USE FIGURED DIMENSIONS ONLY.
 - ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY TO THE ENGINEER.
 - THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, ENGINEERS, SUBCONTRACTORS AND SPECIALISTS DRAWINGS AND SPECIFICATIONS.
 - FIGURED DIMENSIONS ONLY TO BE USED. ANY QUERIES OR DISCREPANCIES TO BE REFERRED TO THE ENGINEER (VALE CONSULTANCY) IMMEDIATELY.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH VALE DRAWING No. 10511/500

Issue for SAB
Approval

rev.	drawn	chkd.	LR	MA	12/03/2020	description
01	RGP	LR	MA			SAB Approval Issue
Client						
INSPIRE DESIGN						
Project						
RESIDENTIAL DEVELOPMENT FORMER GLAMORGAN HOTEL PORTHCRAWL						
Title						
DRAINAGE CONSTRUCTION DETAILS SH 1						
 29 Bocam Park, Old Field Road, Pencoed, Bridgend CF35 5LJ. Phone: 01656 863794 Email: enquiries@vale-consultancy.co.uk						
date	drawn	checked	approved			
11.03.20	RGP	JW	LR	11.03.20	11.03.20	
scale @ A1						
AS SHOWN			10511			
status	drg. no.					rev.
P	10511/503					01