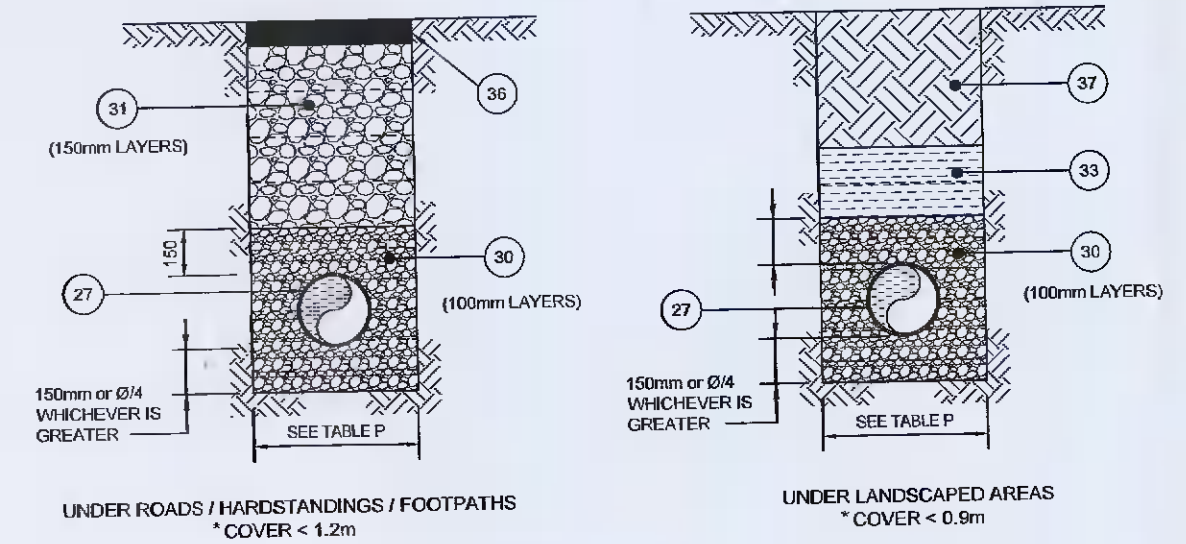


RIGID PIPES WITH CONCRETE BED & SURROUND
SCALE 1:25

CONCRETE PIPE ENCASEMENT DETAIL
SCALE 1:25

REINSTATEMENT OF PIPE TRENCH IN EXISTING ROAD
SCALE 1:25



UPVC PIPES WITH GRANULAR BED & SURROUND
SCALE 1:25

IF COVER IS LESS THAN THE SPECIFIED LIMITS, PIPE TO BE FULLY SURROUNDED IN 150mm THICK CONCRETE (SEE DETAIL).

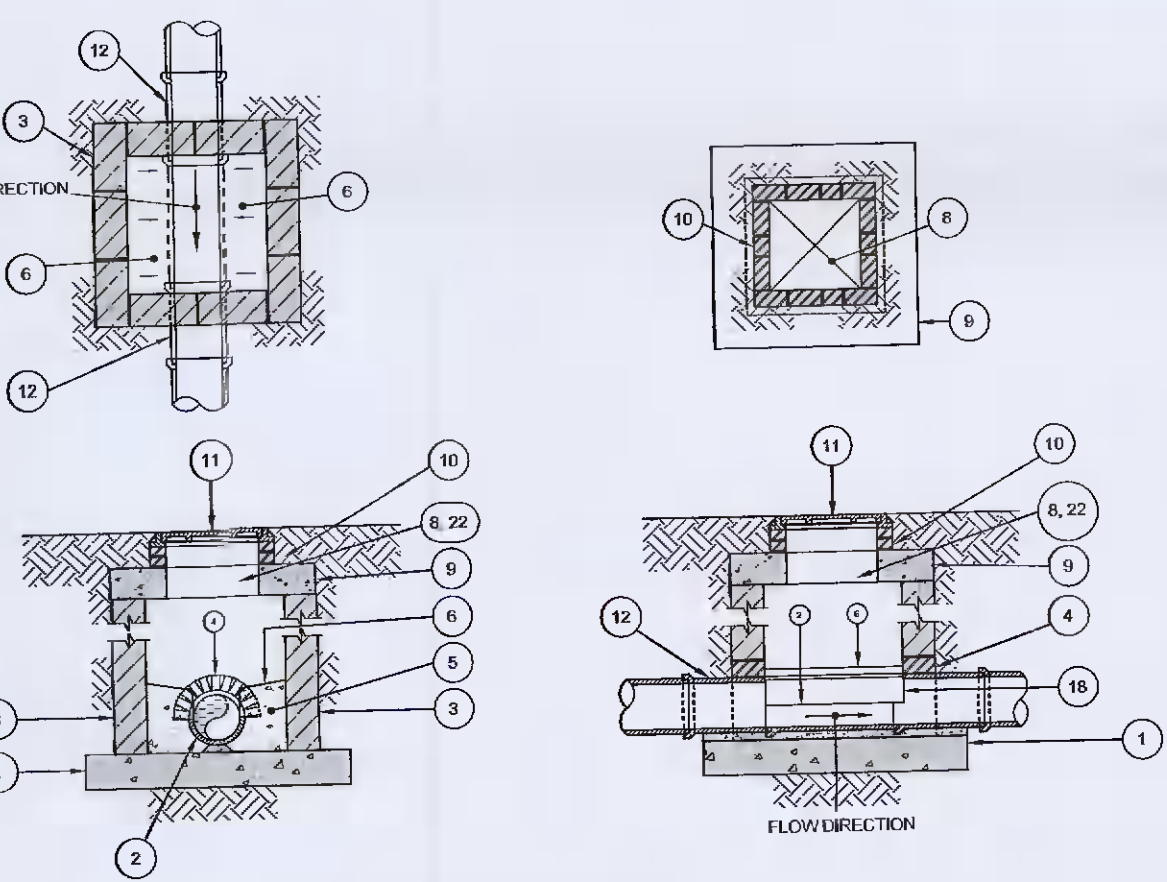
IF COVER IS LESS THAN THE SPECIFIED LIMITS, PIPE TO BE FULLY SURROUNDED IN 150mm THICK CONCRETE (SEE DETAIL).

- 1. FORM A SAND CUT 150mm DEEP AT A MIN. OF 100mm FROM SIDES OF EXCAVATION PRIOR TO PERMANENT REINSTATEMENT...
2. LEAN-MIX SURFACE TO BE SPRAYED PER CLAUSE 602 (NA SPEC.) PRIOR TO APPLICATION OF BASE COURSE...
3. JOINTS SEALED WITH HOT BITUMEN AND TOPPED WITH THE SAND / GRIIT TO GET A MINIMUM 35% RESISTANCE VALUE AS DETERMINED BY THE PORTABLE ROAD RESISTANCE TEST...
4. JOINTS SEALED WITH HOT BITUMEN AND TOPPED WITH THE SAND / GRIIT TO GET A MINIMUM 35% RESISTANCE VALUE AS DETERMINED BY THE PORTABLE ROAD RESISTANCE TEST...

Table with 2 columns: PIPE SIZE (mm) and WIDTH OF TRENCH (mm). Rows include min and max values for pipe sizes from 110 to 450mm.

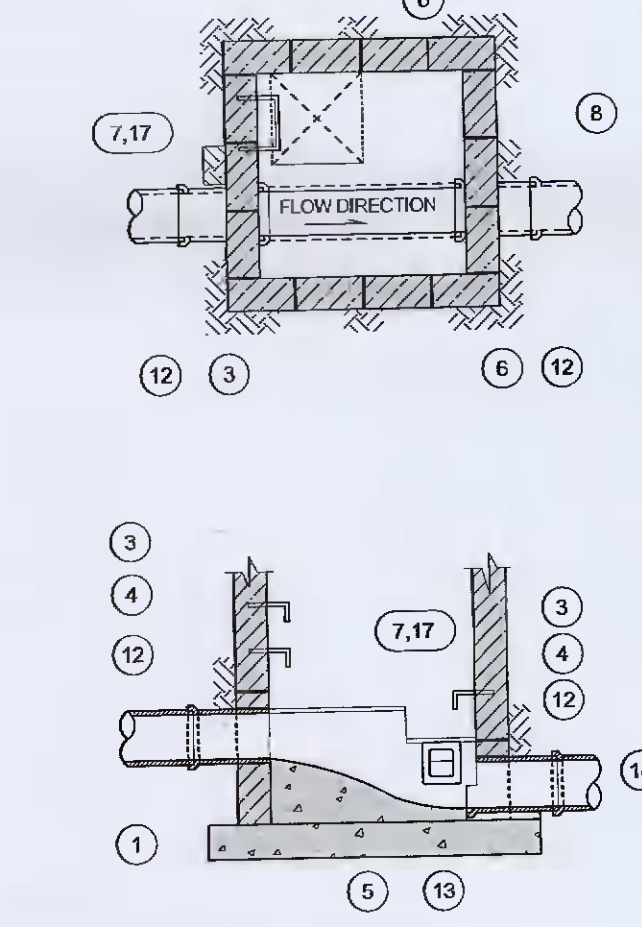
DETAIL NOTES

- 1) 225mm THICK CL. 20/20mm MASS CONCRETE FOUNDATIONS.
2) PERFORMED HALF CIRCLE CHANNEL PIPES. THE PIPELINE MAY, WHERE PRACTICABLE, BE Laid THROUGH THE MANHOLE AND THE CROWN CUT OUT TO...
3) MANHOLE CONSTRUCTION
a. FOR SURFACE WATER MANHOLES HIGH-DENSITY BLOCKS TO CL. S10...
b. BLOCK WORK SHALL BE BEDDED AND JOINTED USING MORTAR TO...
c. JOINTS SHALL BE FLUSH POINTED AS THE WORK PROCEEDS.
4) RELIEVING ARCH FORMED BY 215 x 115 x 65 SOLID ENGINEERING BRICK CLASS 'A' OR 'B'...
5) BRANCHING AND PIPE CHANNEL PIPE SURROUND - CL. 20/20 CONCRETE...
6) BENCHING FINISHED IN 2:1 SAND-CEMENT MORTAR WITH A SMOOTH TROWEL...
7) STANDARD RUNS AT 300 CC VERTICALLY AND GALVANISED TO THE LATEST VERSION OF BS. 728 OR EQUIVALENT...
8) 600mm SQUARE OPE IN ROOF SLAB...
9) PRECAST R.C. ROOF SLABS SHALL BE 200mm THICK CLASS 30/20mm, WITH 40mm COVER TO SLAB EDGE, DESIGNED TO BS 8100 TO TAKE FULL TRAFFIC LOADING...
10) 1 TO 2 COURSES OF SOLID ENGINEERING BRICKS CL. 17 TO BS 8119/BS 8121 SET IN 1:3 (CEMENT AND MORTAR)...
11) CLASS D400 OR E600 MANHOLE COVER AND FRAME TO BS 6891, 150mm DEEP FRAME FOR ROADS AND 100mm DEEP FOR FOOTPATHS AND GREEN AREAS...
12) SHORT LENGTH PIPE AND PIPE JOINT EXTERNAL TO MANHOLE SHALL NOT EXCEED 600mm FROM THE INNER FACE OF MANHOLE WALL...
13) TOE HOLES OF 200mm MINIMUM DEPTH AND GALVANISED STEEL SAFETY RAILINGS TO BE PROVIDED IN BRANCHING OF SIDINGS GREATER THAN 250mm AND DEPTH TO INVERT +200 FOR ACCESS TO INVERT...
14) A SAFETY CHAIN IS TO BE PROVIDED ON PIPES THAT EXCEED 450mm IN DIAMETER...
15) WHEN DEPTH OF MANHOLES TO INVERT IS GREATER THAN 3.0m LADDERS SHALL BE USED...
16) LADDER STRINGERS SHOULD BE ADEQUATELY SUPPORTED FROM THE MANHOLE WALL AT INTERVALS OF NOT MORE THAN 2.0m...
17) ALL LADDERS, RINGS, HANDRAILS, SAFETY CHAINS ETC. SHALL BE HOT DIP GALVANISED TO BS. 728 OR EQUIVALENT...
18) PIPE SHOULD BE CUT THROUGH THE INSIDE SURFACE OF THE MANHOLE WALL SO THAT THE CHANNEL EXTENDS THE FULL LENGTH OF THE MANHOLE (EXCEPT FOR PRECAST MANHOLES)...
19) POSITION OF 910 SQUARE OPE IN INTERMEDIATE ROOF SLAB...
20) FOR MANHOLES >5m DEPTH TO INVERT USE S20/20mm IN-SITU CONCRETE...
21) PRECAST MANHOLES, CHAMBER WALLS AND COVER SLAB TO BE CONSTRUCTED TO BS EN 1917 AND BS EN 12412...
22) MANHOLE OPENINGS TO BE SITUATED FURTHEST FROM THE NEAREST CARRIAGEWAY...
23) FOR BEDDING AND SEALING OF CHAMBER RINGS, THE TOP RING (TO PRECAST COVER SLAB) AND BOTTOM RING TO BE BEDDED WITH CEMENT MORTAR...
24) PRECAST MANHOLES TO BE SURROUNDED WITH A MINIMUM OF 150mm THICK GRADE 20/20 CONCRETE...
25) CONCRETE SEWER PIPES WITH SPIGOT AND SOCKET JOINTS AND RUBBER RING FITTINGS TO COMPLY WITH BS EN 1916 AND BS 8204 OR EQUIVALENT STANDARD CLASS III OR CLASS II...
26) VITRIFIED CLAY PIPES AND FITTINGS COMPLYING WITH THE REQUIREMENTS OF BS EN 252-1/2: 1992 OR EQUIVALENT STANDARD CLASS 160 OR CLASS 200...
27) UNPLASTICISED POLYETHYLENE (UPVC) PIPES AND FITTINGS IN ACCORDANCE WITH THE REQUIREMENTS OF BS 4214...
28) CONCRETE BED AND SURROUND TO BE A MINIMUM 150mm THICK IN-SITU CONCRETE CLASS 20/20mm AND HAUNCHED HALF WAY UP THE BARREL OF THE PIPE...
29) GRANULAR BED AND SURROUND FOR RIGID PIPES TO BE EITHER: A. 14mm TO 5mm GRADED AGGREGATE GR. B. 10mm SINGLE SIZED AGGREGATE...
30) GRANULAR BED AND SURROUND AND COVER FOR UPVC TO BE: (A) 14mm TO 5mm GRADED AGGREGATE (PIPE DIAMETER < 315mm) (B) 10mm SINGLE SIZED AGGREGATE (PIPE DIAMETER > 315mm)...
31) GRANULAR BACKFILL MATERIAL SHALL BE IN COMPLIANCE WITH CL. 4.1.5.6 OF GRANULAR MATERIAL...
32) SELECTED FILL SHOULD BE FREE FROM STONES LARGER THAN 50mm LUMPS OF CLAY OVER 15mm...
33) GENERAL BACKFILL MATERIAL SUITABLE FOR BACKFILL ABOVE SELECTED FILL MATERIAL SHOULD BE FREE FROM BOULDERS, LUMPS OF CONCRETE...
34) PIPES WITH INADEQUATE COVER TO BE FULLY SURROUNDED IN 150mm THICK GRADE 20/20mm CONCRETE...
35) LEAN-MIX BACKFILL TO TRENCHES IN EXISTING ROAD...
36) SURFACING TO BE IN ACCORDANCE WITH THE ROAD SPECIFICATION AND, IF APPROPRIATE, LOCAL AUTHORITY REQUIREMENTS...
37) GOOD QUALITY TOPSOIL, 450mm MINIMUM THICK TO BE PLACED OVER BACKFILL IN ACCORDANCE WITH PARS DEPARTMENT / LANDSCAPE ARCHITECTS REQUIREMENTS...



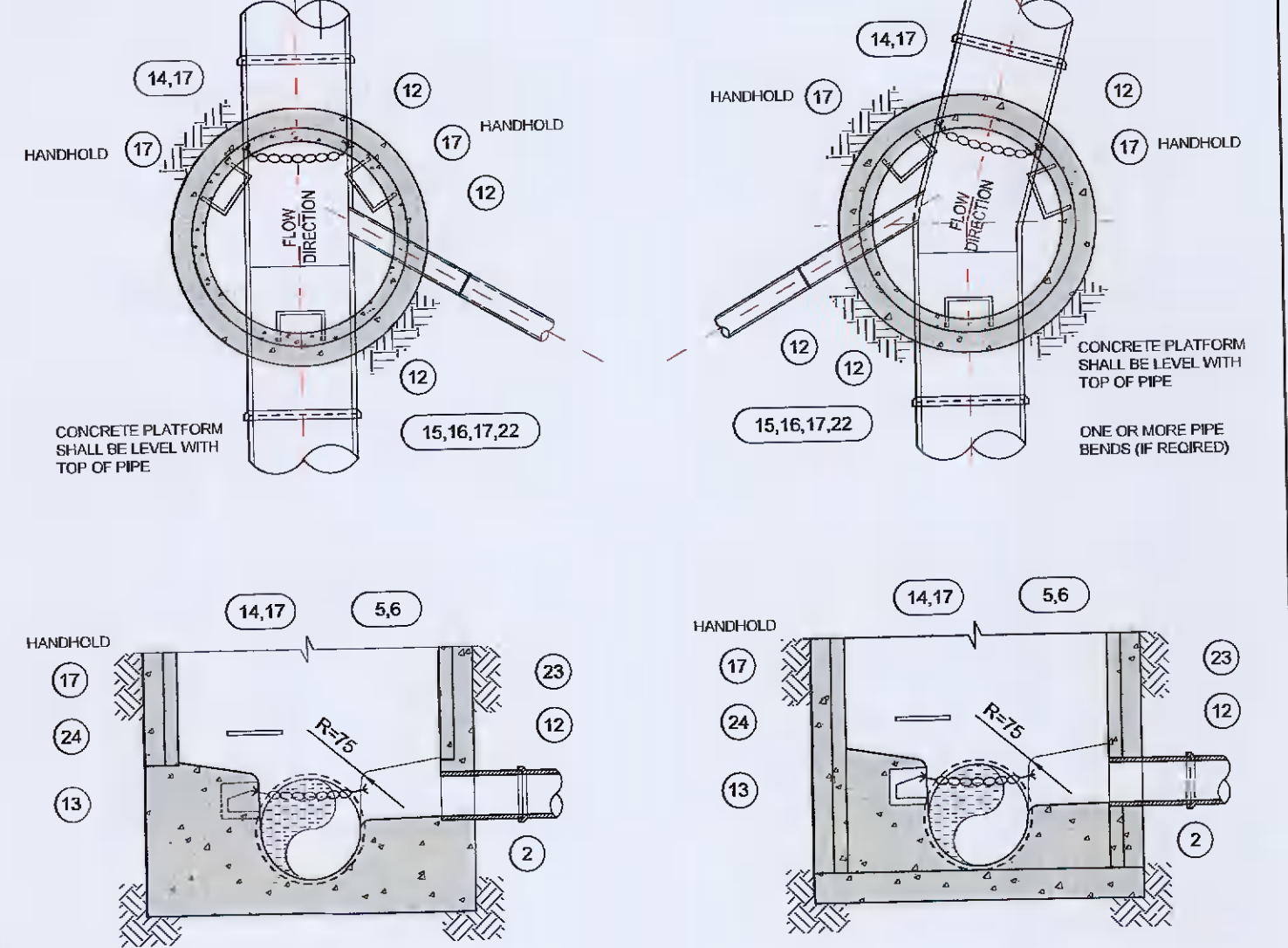
TYPICAL MANHOLE DETAIL A

TYPICAL MANHOLE DETAIL B



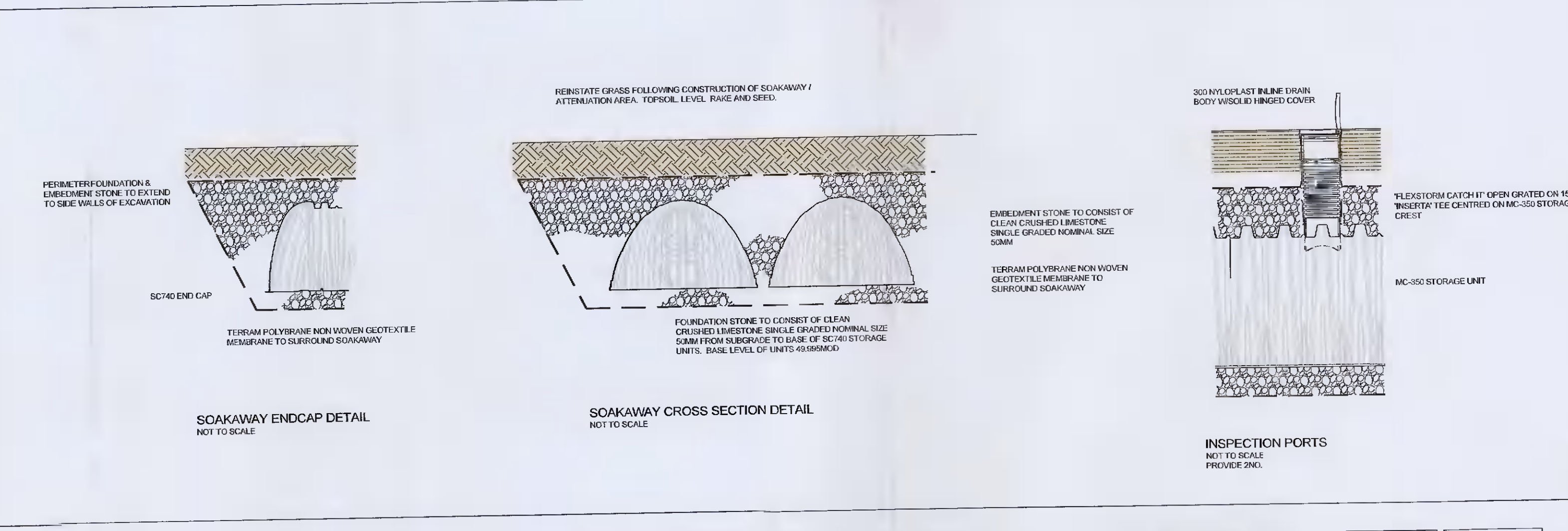
RAMP MANHOLE

Table R: INLET DIA (mm) vs DEPTH (max) (mm). Rows include H and A dimensions for depths from 600 to 750mm.



STRAIGHT INVERT

CURVED INVERT



SOAKAWAY ENDCAP DETAIL

SOAKAWAY CROSS SECTION DETAIL

INSPECTION PORTS

Table B: MAXIMUM PIPE DIAMETER vs CHAMBER INTERNAL DIAMETER. Columns A and B show dimensions for various pipe sizes.

Project information including planning application number, client name (GAELSCOIL NAOMH PADRAIG), and date.

IMPORTANT NOTES section with detailed instructions regarding construction standards, materials, and safety.

Project information including project name (DRAINAGE DETAILS - MANHOLES & SOAKAWAYS), drawing number (02/01), and scale (1:25/50).