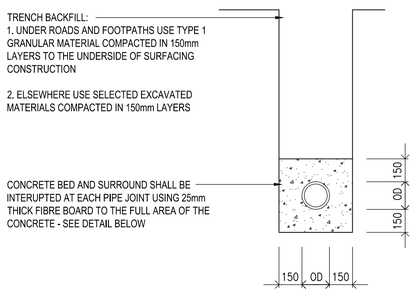


USE CLASS S BED AND SURROUND WHERE COVER TO PIPE IS BETWEEN 0.75m AND 1.2m IN VEHICULAR ACCESS AREAS AND LESS THAN 0.45m UNDER FOOTPATHS/PAVED AREAS

PIPE DIAMETER:	BEDDING MATERIAL: - BS EN (13242)
100Ø	10mm SINGLE SIZE AGGREGATE
101Ø -150Ø	10mm OR 14mm SINGLE SIZE AGGREGATE
151Ø - 500Ø	10mm, 14mm OR 20mm SINGLE SIZE AGGREGATE
501Ø AND ABOVE	10mm, 14mm, 20mm OR 40mm SINGLE SIZE CRUSHED ROCK

NOTE:
SELECTED BACKFILL & SIDEFILL SHOULD BE PLACED AS SOON AS POSSIBLE AS THE PIPES HAVE BEEN BEDDED, JOINTED & INSPECTED. ENSURE SELECTED BACKFILL & SIDEFILL SHOULD BE FREE FROM :-
- STONES LARGER THAN 40MM
- CLAY LUMPS LARGER THAN 100MM
- TIMBER, FROZEN MATERIAL OR VEGETABLE MATTER.

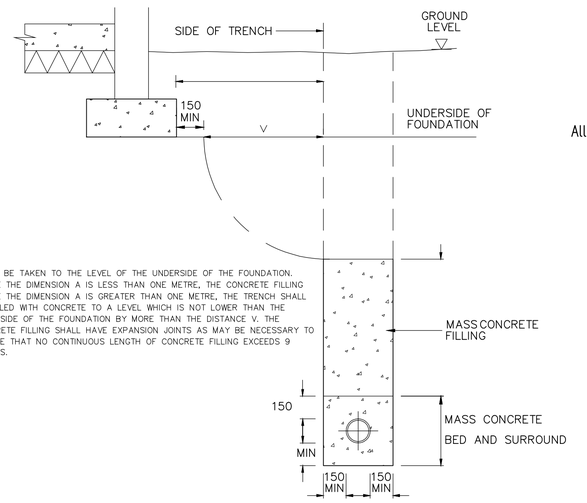
CLASS S GRANULAR BED AND SURROUND LANDSCAPED NON TRAFFICKED AREAS



NOTES: CLASS Z CONCRETE BED AND SURROUND TO BE USED UNDER ALL FOUNDATIONS AND FLOOR SLABS, WHERE COVER TO CROWN OF PIPE IS LESS THAN 0.75m IN VEHICULAR ACCESS AREAS, AND WHERE PIPES ARE LAID WITHIN 1.0m OF FOUNDATIONS

PIPES GRANULAR MATERIAL BED AND SURROUND LAID IN WATERLOGGED ENVIRONMENT TO BE WRAPPED WITH GEOTEXTILE TO PREVENT WASHING OUT OF AGGREGATES.

CLASS Z CONCRETE BED AND SURROUND BELOW TRAFFICKED AREAS-DRIVES HARDSTANDINGS ETC.

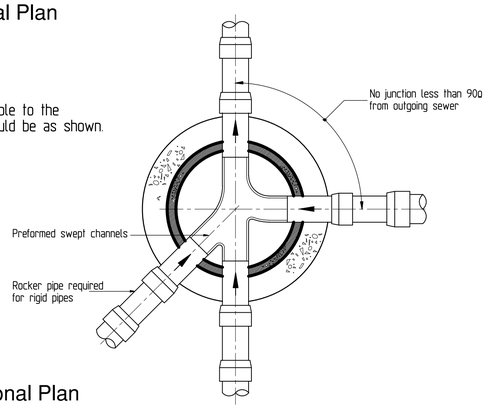


TYPICAL EXCAVATION DETAIL ADJACENT TO DWELLING FOUNDATIONS (SCALE 1:20)

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 as shown.

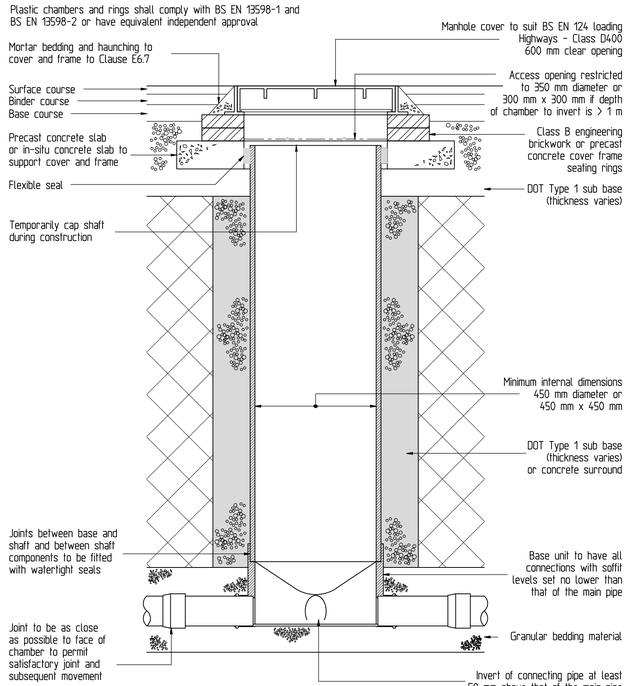
Nominal diameter (mm)	Maximum effective length (m)
150 - 600	0.6
601 - 750	1.00
over 750	1.25

All pipes entering the bottom of the manhole to have soffits level.



Sectional Plan

TYPICAL ARRANGEMENT OF PIPE JUNCTIONS WITHIN MANHOLES



Note: Where the access chamber is in the highway the Highway Authority can have specific requirements

Sectional Plan

A02

MANHOLE TYPE 3 - DEPTH COVER LEVEL TO SOFFIT OF PIPE 1.5m SCALE 1:20

TYPICAL INSPECTION CHAMBER DETAIL - TYPE 3 (Flexible material detail)

Maximum depth from cover level to soffit of pipe in areas subject to vehicle loading 3 m, non-entry

GENERAL NOTES

1) THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND SPECIALISTS' DRAWINGS.
2) DO NOT SCALE FROM THIS OR ANY OTHER PCC CONSULTANTS LTD DRAWING.
3) ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION OR FABRICATION.

TEMPORARY WORKS

1) THE MAIN CONTRACTOR WILL BE RESPONSIBLE FOR ALL TEMPORARY WORKS. A SPECIALIST SUBCONTRACTOR SHOULD BE APPOINTED TO DESIGN AND INSTALL ALL TEMPORARY WORKS TO ADEQUATELY SUPPORT ALL APPLIED LOADS.
2) THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO AVOID CAUSING INSTABILITY OR DAMAGE TO EXISTING STRUCTURES, SURFACE FINISHES ETC.

CONCRETE WORKS

1) ALL REINFORCED CONCRETE TO BE GRADE PAV2 MIX - IN ACCORDANCE WITH BS 8500:PART 1
2) ALL CONCRETE SHALL BE IN ACCORDANCE WITH BS 8500:PART 2 & BS EN 206-1
3) ALL BAR REINFORCEMENT SHALL BE TO BS 8666: 2000
ALL FABRIC REINFORCEMENT SHALL BE TO BS 4483:1998 AND MINIMUM LAP LENGTH SHALL BE 450 MM.
4) ALL REINFORCEMENT SHALL BE SUFFICIENTLY SUPPORTED, POSITIONED AND RESTRAINED USING PROPRIETARY CHAIRS AND SPACERS TO ACHIEVE THE REQUIRED COVER.
5) THE CONCRETE COVER REQUIREMENTS SHALL BE MINIMUM 40 MM TO ALL REINFORCEMENT (U.N.O). IF CAST WITHIN FORMWORK. COVER SHALL BE MIN. 75MM IF CAST AGAINST GROUND.

EXCAVATIONS AND FILLING

1. ALL TRENCHES AND PITS EXCAVATED FOR THE CONSTRUCTION OF DRAINAGE AND FOUNDATIONS MUST BE ADEQUATELY SUPPORTED AT ALL TIMES TO SAFEGUARD THE STABILITY OF ADJACENT STRUCTURES AND PLANT AND THE SAFETY AND WELFARE OF SITE OPERATIVES
2 ALL WORK IN OPEN EXCAVATIONS AND CONFINED SPACES SHALL BE CARRIED OUT IN ACCORDANCE WITH CURRENT HEALTH AND SAFETY REGULATIONS.
3. ALL STONE FILL SHALL BE CLEANED, WELL GRADED, CRUSHED STONE, 50 MM DOWN AND SHALL BE LAID AND COMPACTED IN LAYERS NOT EXCEEDING 150mm THICKNESS.

NOTE:

REFER TO PCC CONSULTANTS LTD DRAWING NUMBER 10109/PD/01 & /02 FOR SURFACE WATER DRAINAGE GENERAL ARRANGEMENT LAYOUT.

GENERAL NOTES

1. ALL EXISTING DRAINAGE NOT BEING REUSED TO BE GRUBBED OUT.

2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS.

3. SHOULD THERE BE ANY CONFLICT BETWEEN THE DETAILS INDICATED ON THIS DRAWING AND THOSE INDICATED ON OTHER DRAWINGS THE ENGINEER SHOULD BE INFORMED PRIOR TO CONSTRUCTION ON SITE.

4. UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT AUTHORITY, IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS ISSUED ARE PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR COMMENCE SITE WORK PRIOR TO SUCH APPROVAL BEING GIVEN, IT IS ENTIRELY AT HIS OWN RISK.

5. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

6. THE RISK ASSESSMENTS FOR THIS PROJECT MUST BE REVIEWED PRIOR TO THE COMMENCEMENT OF ANY WORKS ON SITE.

7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXECUTE THE WORKS AT ALL TIMES IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE HEALTH AND SAFETY AT WORK ACT 1974, AND THE C.D.M. REGULATIONS 2007.

8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY SERVICE APPARATUS IN THE VICINITY OF THE WORKS. THE CLIENT WILL ACCEPT NO CLAIMS WHATSOEVER IN RESPECT OF LOSSES OR DAMAGE CAUSED IN RESPECT OF SUCH APPARATUS, HOWEVER CAUSED.

9. THE CONTRACTOR SHALL CHECK ALL TIE-INS FOR LINE AND LEVEL WITH EXISTING BEFORE COMMENCING ANY WORKS. THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY IN WRITING, SHOULD ANY ERRORS BE FOUND.

10. ALL LEVELS ARE RELATED TO ORDNANCE DATUM.

11. ALL PRIVATE DRAINAGE WORKS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF BUILDING REGULATIONS 2000, PART H, "DRAINAGE AND WASTE DISPOSAL".

12. PIPES WITH LESS THAN 600MM COVER ARE TO BE PROTECTED IN ACCORDANCE WITH PART H.

13. ALL PIPES, CHAMBERS AND FITTINGS TO BE INSTALLED, BEDDED AND BACKFILLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.

14. PIPE WHICH RUN ADJACENT TO BUILDINGS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH PART H, CLAUSES 2.23 TO 2.25.

15. ALL DRAINS IN THE VICINITY OF EXISTING OR PROPOSED TREES TO BE CONSTRUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF CURRENT NHBC STANDARDS.

16. ALL EXISTING LAND DRAINS ENCOUNTED ON SITE DURING CONSTRUCTION TO BE RE-CONNECTED.

17. SHOULD ANY CHANGE IN SLAB LEVEL BE CONSIDERED, AGREEMENT SHALL BE SOUGHT FROM THE CLIENTS ENGINEER PRIOR TO COMMENCEMENT AND SHALL TAKE FULL ACCOUNT OF ALL RESTRICTIONS TO THE SLAB LEVEL.

18. THE LAYOUT OF PIPELINES, MANHOLES ETC. IS DESIGNED TO SUIT THE PERMANENT CASE. ADDITIONAL LOADS OVER & ABOVE THOSE DESIGNED FOR MAY ARISE DURING THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL PROVIDE ANY NECESSARY TEMPORARY PROTECTION TO ENSURE THAT PIPELINES, MANHOLES ETC. ARE NOT DAMAGED AS A RESULT OF HIS METHOD OF WORKING.

19. ALL PROPOSED PRIVATE DRAINAGE TO BE 150Φ PIPEWORK UNLESS NOTED OTHERWISE, SW LAID AT 1:100, FW LAID AT 1:80; EXCEPT:-

19.1. PIPEWORK FROM GULLYS AND SUMP UNITS TO BE 150Φ LAID AT 1:150; UNLESS STATED OTHERWISE.
19.2. WHERE STATED OTHERWISE.
19.3. DOWNSTREAM OF LARGER PIPEWORK.

20. ALL RWP'S TO HAVE RODDABLE ACCESS AND TO BE LOCATED BY THE ARCHITECT.

REV:	DETAILS:	DATE:	BY: / CH'D:
A02	APPROVAL ISSUE - DETAILS AMENDED	23.07.21	PJ / PJC
A01	APPROVAL ISSUE	07.04.21	PJ / PJC

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©

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MARGATE
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PROJECT DETAILS:
PROPOSED RESIDENTAIL DEVELOPMENT
5 DETACHED DWELLINGS
LAND SOUTH OF DROVE ROAD
SHEPEAU STOW, SPALDING
PE12 0UQ

DRAWING TITLE:
PROPOSED SW & FW DRAINAGE TYPICAL DRAINAGE DETAILS
(DRAWING 2 0F 2)

STATUS:
APPROVAL

DRAWN BY:	PROJECT DESIGNERS:	PAPER SIZE:
PJ	PJC	A0
DATE:	SCALE:	CHECKED:
APRIL 20	AS NOTED	PJC

DRAWING NUMBER: 10109/PD/04
REVISION: A02