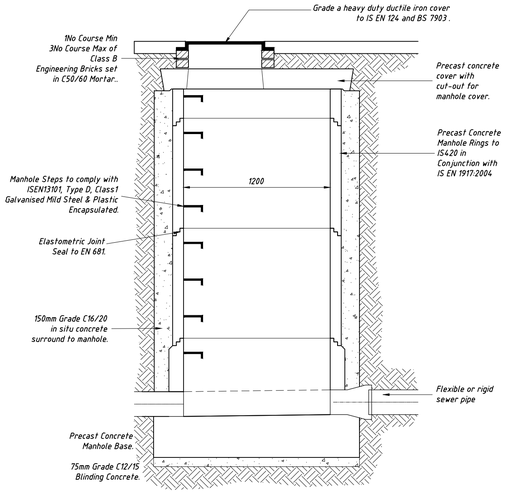
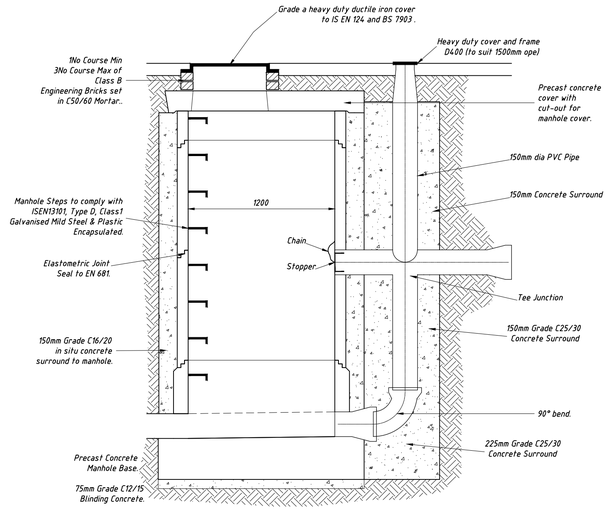
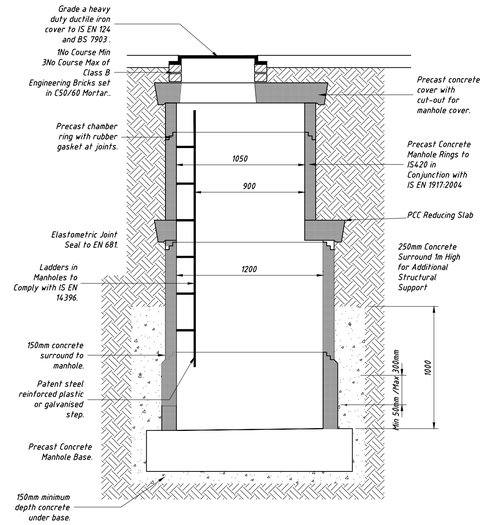


MH (TYP) to 3.0m Depth
Scale 1:25

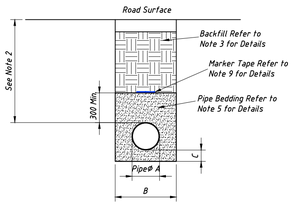


Drop MH
Scale 1:25



MH (TYP) to 3.0m to 6.0m Depth
Scale 1:25

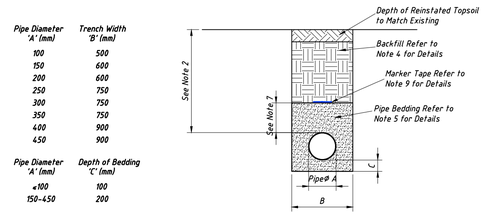
1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. THE MINIMUM DEPTH OF COVER FROM THE FINISHED SURFACE TO THE CROWN OF GRAVITY PIPES WITHOUT PROTECTION SHOULD BE AS FOLLOWS:
A) GARDENS AND PATHWAYS WITHOUT ANY POSSIBILITY OF VEHICULAR ACCESS - DEPTH NOT LESS THAN 0.5 M. (THIS WOULD NORMALLY RELATE TO DRAINS IN PRIVATE PROPERTY, SHALLOW PIPES OF THIS NATURE ARE UNDESIRABLE AND SHOULD BE INSTALLED IN ACCORDANCE WITH THE CURRENT BUILDING REGULATIONS).
B) DRIVEWAYS, PARKING AREAS AND YARDS WITH HEIGHT RESTRICTIONS TO PREVENT ENTRY BY VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES - DEPTH NOT LESS THAN 0.9 M.
C) DRIVEWAYS, PARKING AREAS AND NARROW STREETS WITHOUT FOOTWAYS (E.G. MEWS DEVELOPMENTS) WITH LIMITED ACCESS FOR VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES - DEPTH NOT LESS THAN 0.9 M.
D) DEPTHS OF SEWERS IN GATED ESTATES SHALL BE SIMILAR TO THAT OUTLINED ABOVE.
E) AGRICULTURAL LAND AND PUBLIC OPEN SPACE - DEPTH NOT LESS THAN 0.9 M.
F) OTHER HIGHWAYS AND PARKING AREAS WITH UNRESTRICTED ACCESS TO VEHICLES WITH A GROSS VEHICLE WEIGHT IN EXCESS OF 7.5 TONNES - DEPTH NOT LESS THAN 1.2 M.
3. CLAUSE 504 / 505 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS IS TO BE USED AS BACKFILL MATERIAL WHERE THE SEWER MAIN IS LOCATED IN ROADS, FOOTPATHS OR WHEN THE NEAREST PART OF THE TRENCH IS WITHIN 1m OF THE PAVED EDGE OF THE ROADWAY. CLAUSE 504 / 505 IS TO BE COMPACTED AS PER CLAUSE 502 OF THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS. CLAUSE 505 IS TO BE USED WITHIN 500mm OF CEMENT BOUND MATERIALS, CONCRETE PAVEMENTS, CONCRETE STRUCTURES OR CONCRETE PRODUCTS. OTHERWISE CLAUSE 504 MAY BE USED. ALTERNATIVE BACKFILL MATERIAL TO THAT DESCRIBED ABOVE MAY BE USED IN THE ROAD AREA WHERE THE ROADS AUTHORITY MAY BE ALLOWED BY IRISH WATER WHERE THE ROADS AUTHORITY IN WHOSE FUNCTIONAL AREA THE DEVELOPMENT IS LOCATED, PROVIDES WRITTEN APPROVAL TO THE DEVELOPER TO THE USE SUCH ALTERNATIVE MATERIAL.
4. SELECTED EXCAVATED MATERIAL MAY BE USED IN GREEN-FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO REVIEW BY IRISH WATER.
5. PIPE BEDDING SHALL COMPLY WITH WS 4-09-02 AND IGN 4-09-01 GRANULAR MATERIAL SHALL BE 14mm TO 6mm GRADED AGGREGATE (CLASS 1) OR SUITABLE GRADED AGGREGATE. CLEAN CONCRETE SAND MAY BE USED. BEDDING, WHERE REQUIRED, SHALL BE TO STD-WW-06. IN SOFT GROUND CONDITIONS (CBR < 5) THE MATERIAL SHOULD BE EXCAVATED AND DISPOSED OF IN ACCORDANCE WITH THE WASTE MANAGEMENT ACT AND CLAUSE 504 / 505 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS SHALL REPLACE THE EXCAVATED MATERIAL. WRAPPED IN GEO-TEXTILE WRAPPING. ALTERNATIVELY, SPECIAL PIPE SUPPORT ARRANGEMENTS, INCLUDING PILING ETC. MAY BE REQUIRED WHERE THE DEPTH OF SOFT MATERIAL IS EXCESSIVE. SUCH ARRANGEMENTS SHALL BE SUBJECT TO ASSESSMENT BY IRISH WATER BEFORE ADVANCING WITH THE WORK.
7. PIPE BACKFILL. WHERE TYPE B BACKFILL (SELECTED EXCAVATED MATERIAL) WILL BE ALLOWED ABOVE THE SIDE HAUNCH GRANULAR MATERIAL IN THE CASE OF RIGID PIPES. A GRANULAR SURROUND OF A MINIMUM DEPTH OF 150mm ABOVE THE CROWN OF THE PIPE IS REQUIRED FOR FLEXIBLE PIPES . AND TYPE B MATERIAL MAY BE USED AS BACKFILL ABOVE THIS. ALL RISING MAINS IN GREENFIELD AREAS SHALL HAVE A MINIMUM COVER OF 300mm OF GRANULAR MATERIAL ABOVE THE EXTERNAL CROWN OF THE PIPE.
8. PIPES SHALL NOT BE SUPPORTED ON STONES, ROCKS OR ANY OTHER HARD SPOT. IN ROCK, THE TRENCH BOTTOM SHALL BE EXCAVATED TO A DEPTH OF 150mm BELOW THE ACTUAL DEPTH OF THE TRENCH WITH THE VOID FILLED WITH CLAUSE 504 / 505 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS. THE GRANULAR MATERIAL SHALL BE LAID ABOVE THIS VOID BACKFILL MATERIAL.
9. NON DEGRADABLE MARKER TAPE SHOULD BE INSTALLED AT TOP OF PIPE BEDDING LAYER. IN THE CASE OF NON METAL PIPE MATERIAL, THE MARKER TAPE SHOULD INCORPORATE A TRACE WIRE WHICH IS LINKED TO FITTINGS AND TERMINATED AT THE WASTE WATER PUMPING STATION AND THE DISCHARGE MANHOLE.
10. TRENCH WIDTHS FOR PIPE SIZES 150mm - 450mm MAY BE <500mm, SUBJECT TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY REQUIREMENTS AND ACCESS REQUIREMENTS.
11. NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS.
12. EXISTING ROAD REINSTATEMENT TO COMPLY WITH CURRENT VERSION OF "GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS" BY THE DEPT. OF TRANSPORT, TOURISM & SPORT, OR TRANSPORT INFRASTRUCTURE IRELAND REQUIREMENTS.



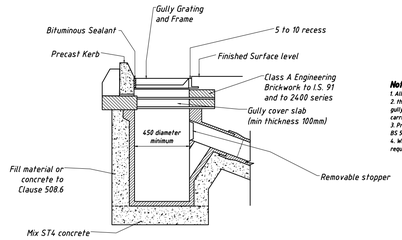
Road Cross Section 1:25

Pipe Diameter "A" (mm)	Trench Width "B" (mm)
100	500
150	600
200	600
250	750
300	750
350	750
400	900
450	900

Pipe Diameter "A" (mm)	Depth of Bedding "C" (mm)
≤100	100
150-450	200

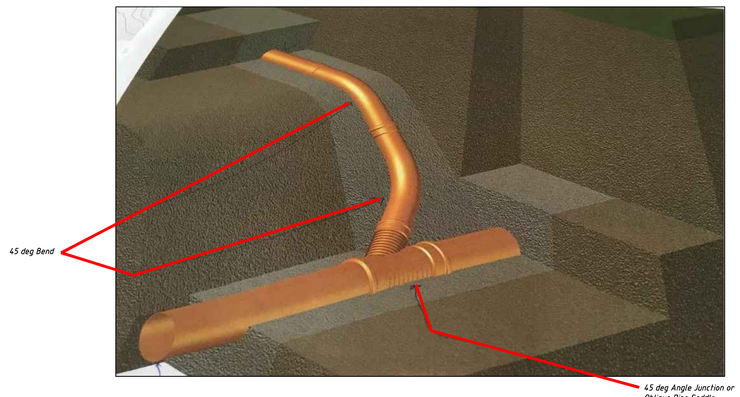


Green Area Cross Section 1:25



Notes:
1. All dimensions are in millimetres.
2. The minimum depth from the top of the grating to the top of the gully outlet is to be 750mm when the connecting pipe is under a carriageway or a hard shoulder and 600mm elsewhere.
3. Precast concrete gullies and cover slabs shall be to BS 5911 : Part 230
4. Where a gully has a trap the stoppers shall comply with requirements of B.S. 5911 Part 2.

Precast Gully Cross Section 1:25



Service Connection

REVISION	DATE	BY	DETAILS
A	06/22	DA	Issued for Planning

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Dimensions are in mm except where indicated. Figured dimensions take precedence over scaled measurements. All dimensions to be checked on site prior to fabrication or construction. All work to be executed in accordance with Building Regulations and Codes. SubContractors are responsible for ensuring compliance with Building Regulations within their trade. Where this drawing is open to public inspection pursuant to a statutory requirement, or is on a statutory register, copying is subject to the requirements of Section 76 of the Copyright and Related Rights Act, 2000.

Drawn By: DA
Approved By: DB
Date Date: 27/06/2022
Issued For: Planning
Scale: 1:25
Rev: A

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Manhole Details