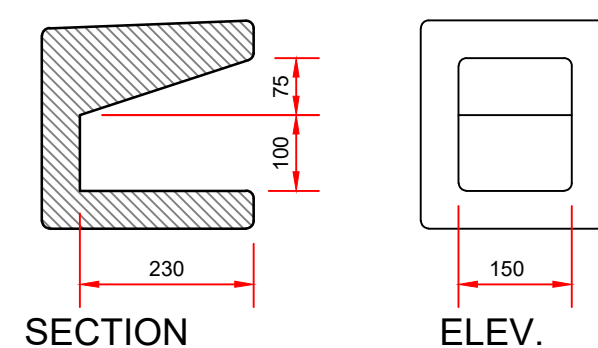
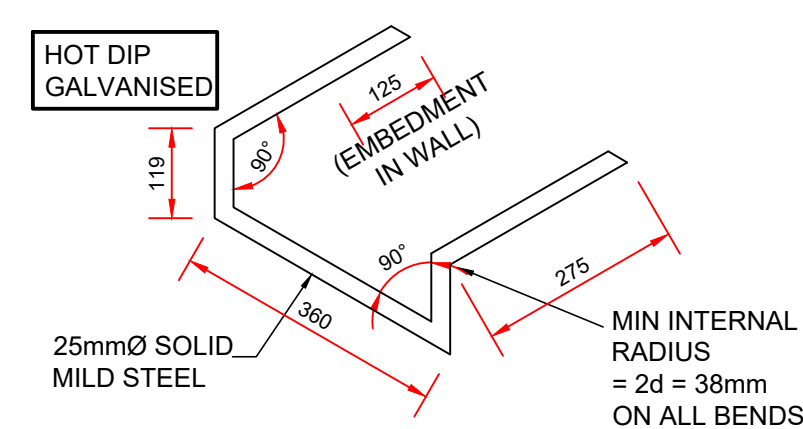
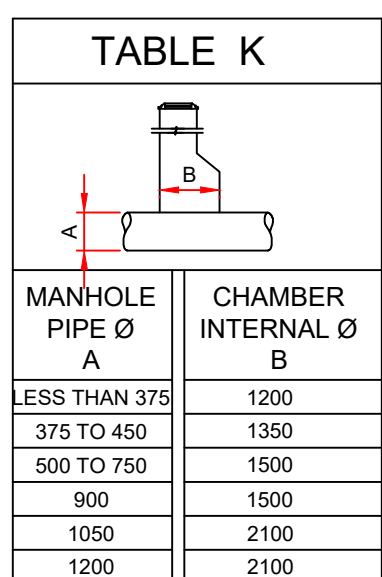




- 1) CLASS D400 OR E600 MANHOLE COVER AND FRAME TO IS EN 124 150mm DEEP FRAME FOR DEEP RINGS & 100mm DEEP FOR FOOTPATHS & GREEN AREAS, NON-ROCK DESIGN, CLOSURE KEYYAWS, MANUFACTURED FROM SPHERICAL GRAPHITE CAST IRON (EN 1561) (ST IRON) (200 x 600 (6000)) CLEAR OPENING, COVER & FRAME COATED IN BITUMEN OR OTHER APPROVED MATERIAL, COVER TO HAVE MINIMUM MASS OF 140kg/m² FRAME BEARING AREA SHALL BE DESIGNED TO PREVENT CAVES FALLING INTO MANHOLE, FRAMES SHALL BE BEDDED ON APPROVED MORTAR TO MANUFACTURERS INSTRUCTIONS.
- 2) SHORT LENGTH PIPE & PIPE JOINT EXTERNAL TO MANHOLE SHALL NOT EXCEED 600mm FROM THE INNER FACE OF MANHOLE WALL.
- 3) TOE HOLES OF 230mm MINIMUM DEPTH & GALVANISED SAFETY RAILINGS TO BE PROVIDED IN BENCHING OF SEWERS GREATER THAN 525mmØ & DEPTH TO INVERT -3M FOR ACCESS TO INVERT.
- 4) A STEELLESS STEEL CHAIN IS TO BE PROVIDED ON PIPES THAT EXCEED 450mmØ, COMPLYING WITH BS 4942 PART 2 OR EQUIVALENT.
- 5) WHEN THE DEPTH OF MANHOLES TO INVERT IS GREATER THAN 3.0m LADDER SHALL BE USED, INSTEAD OF RUNGS TO BS 4211 OR EQUIVALENT EXCEPT THAT STRINGERS SHOULD BE NOT LESS THAN 85x12mm IN SECTIONS & RUNGS 25mm THICK. FIXED LADDERS SHOULD MEET THE DIMENSIONAL REQUIREMENTS OF BS4211 OR EQUIVALENT. DISTANCE FROM THE TOP RUNG OF THE LADDER TO GROUND LEVEL SHOULD NOT EXCEED 500mm
- 6) LADDER STRINGERS SHOULD BE ADEQUATELY SUPPORTED FROM THE MANHOLE WALL AT INTERVALS OF NOT MORE THAN 2.0m. STRINGERS SHOULD BE BOLTED TO CLEATS TO FACILITATE REMOVAL.
- 7) ALL LADDER RUNGS, HANDRAILS, SAFETY CHAINS ETC. SHALL BE HOT DIPPED GALVANISED TO BS 729 OR EQUIVALENT.
- 8) PIPE SHOULD BE CUT FLUSH WITH THE INSIDE SURFACE OF THE MANHOLE WALL SO THAT CHANNEL EXTENDS THE FULL LENGTH OF THE MANHOLE.
- 9) POSITION OF 910 SQUARE OPE IN INTERMEDIATE ROOF SLAB.

- a) ALL MANHOLES SHALL BE WATERTIGHT TO THE SATISFACTION OF THE ENGINEER.
 - b) FORMWORK TO REINFORCED CONCRETE & MASS CONCRETE SHALL COMPLY WITH CLASS 2 SECTION 6.2.7, BS 8110 PART 1:1997.
 - c) FINISH TO THE TOP OF SLABS SHALL COMPLY WITH TYPE A SECTION 6.2.7, BS8110, PART 1997.
 - d) PLATE DIMENSIONS OF MANHOLES ARE BASED ON BLOCKWORK HAVING A CO-ORDINATING SIZE OF 450 x 225 x 100. FORT PIPE DIAMETER OF 750MM USE MANHOLE WITH INTERNAL DIAMETER SIZE = PIPE SIZE +mm -130mm.
 - e) MANHOLES ARE DESIGNED TO BS8005 & WALL THICKNESS TO IS325, BLOCK WORK DESIGN CODE TAKING GRANULAR FILL PRESSURE & H B SURCHARGE.
 - f) REINFORCEMENT TO SLABS ENGINEERS DETAILS.
- 20) FOR MANHOLES >3m DEPTH TO INVERT USE C30/37 INSITU CONCRETE, REINFORCING MESH REP. A935 TO BE FIXED AT MID POINT OF WALL. ADDITIONAL REINFORCEMENT TO BE SUPPLIED OVER PIPE CROWN.
- 21) PRECAST MANHOLES, CHAMBER WALLS & COVER SLAB TO BE CONSTRUCTED TO IS EN 1917 & IS 420:2004
- 22) MANHOLE OPENINGS TO BE SITUATED FURTHEST FROM THE NEAREST CARRIAGEWAY. MANHOLE STEPS-ACCESS TO BE POSITIONED TO ALLOW VIEWING OF ONCOMING TRAFFIC
- 23) FOR BEDDING & SEALING OF CHAMBER RINGS, THE TOP RING (TO PRECAST OVER SLAB) & BOTTOM RING TO BE BEDDED WITH CEMENT MORTAR. FOR INTERMEDIATE RINGS, JOINTS TO BE SEALED WITH APPROVED PREPARED JOINTING STRAP
- 24) PRECAST MANHOLES TO BE SURROUNDED WITH A MINIMUM OF 150mm THICK GRADE C16/20 CONCRETE.
- 25) ALL FOUL MANHOLES TO COMPLY WITH REQUIREMENTS OF IRISH WATER STD-WW-99 TO 13

NOTES:

1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
3. ENGINEER/EMPLOYERS REPRESENTATIVE, APPROPRIATE, TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
4. THE CONTRACTOR SHALL UNDERTAKE A THOROUGH CHECK FOR THE ACTUAL LOCATION OF SERVICES/UTILITIES, ABOVE AND BELOW GROUND, BEFORE ANY WORK COMMENCES
5. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD.

P0	27.09.2024	Issue for PPlanning	AO	SE
Rev	Date	Description	By	Chk

Client: GALWAY COUNTY COUNCIL

Project: Housing Development
Cosmona, Loughrea,
Co. Galway

Title:
STANDARD MANHOLE DETAILS
SHEET 2 OF 2

Scale @ A1: AS SHOWN

Prepared by:	Checked by:	Date:
SB	MG	MAY 2024

Drawing Status: Planning

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Drawing No.:	Revision
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11942-2014

Revision:

P0