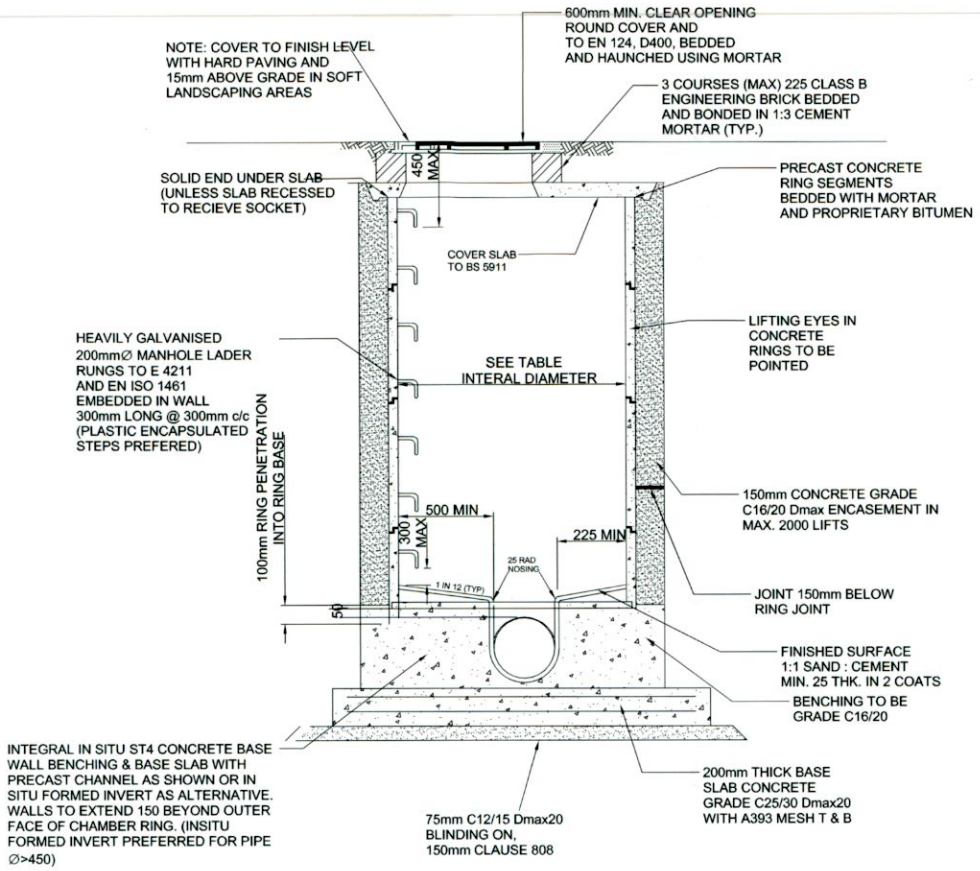
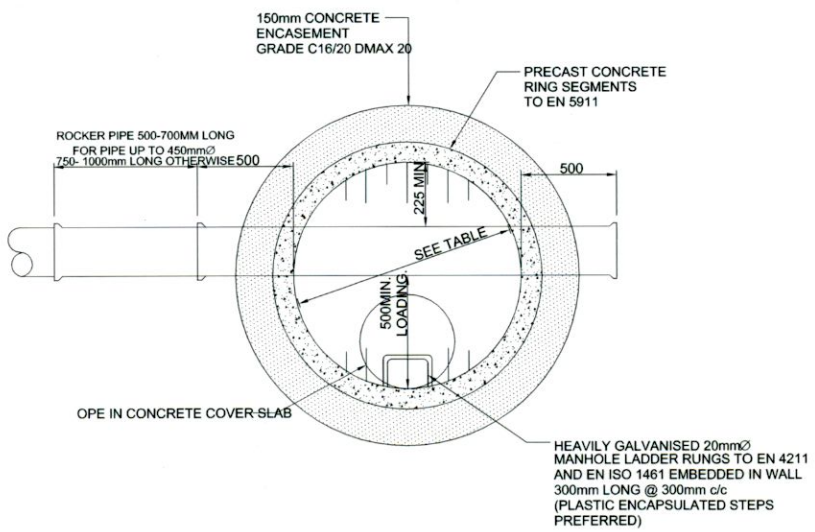


NOTE:
IF BENCHING NOT FORMED WITH INTEGRAL IN - SITU CONCRETE IT WILL BE FORMED USING GRANOLITHIC RENDER

PRECAST CONCRETE MANHOLE<3000mm DEEP, <525mm PIPES DIAMETER

SCALE 1:20



TYPICAL STRAIGHT THROUGH PRECAST CONCRETE MANHOLE

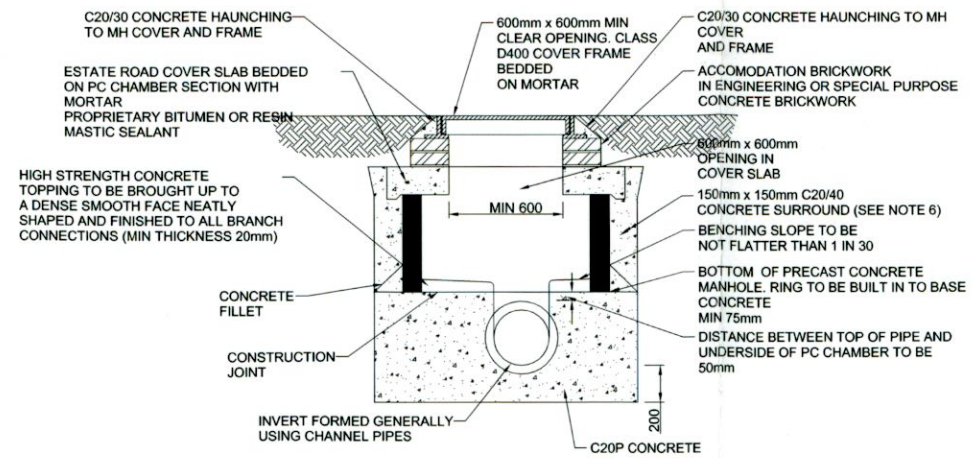
SCALE 1:20

CIRCULAR MANHOLES			MATERIAL DEPTH	
OUTLET DIAMETER	INTERNAL DIMENSIONS	EXTERNAL DIMENSIONS INCL CONC SURROUND	<3m	>3m
UP TO 375mmØ	1200mmØ RING	1680mm	RC & PCC	PCC
450mmØ	1350mmØ RING	1840mm	RC & PCC	PCC
525mmØ	1500mmØ RING	2010mm	RC & PCC	PCC
600mmØ	1500mmØ RING	2010mm	PCC	PCC
750mmØ	1500mmØ RING	2010mm	PCC	PCC
900mmØ	1800mmØ RING	2330mm	PCC	PCC
1050mmØ	2100mmØ RING	2650mm	PCC	PCC

RECTANGULAR MANHOLES (MINIMUM STRAIGHT THROUGH DIMENSIONS)		
OUTLET DIAMETER	DEPTH	INTERNAL DIMENSIONS
150≤ D ≤ 375	ALL	1200 x 910
150≤ D ≤ 375	< 1.5M	1200 x 1135
	> 1.5M	1200 x 1360
	< 1.5M	1500 x 1660
	> 1.5M	1500 x 1885

NOTE:
(ON MANHOLES <1.5mØ, REDUCING SLAB NOT TO BE USED & PCC RINGS TO CONTINUE UP TO COVER SLAB)

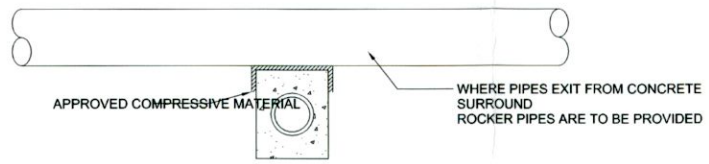
1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. PRE-CAST MANHOLES UNITS: COMPLYING WITH REQUIREMENTS OF IS EN 1917 AND BS 5911-PART 3.
3. THICKER MANHOLE BASES REQUIRED FOR SEWERS IN EXCESS OF 3m DEEP WHERE THE SIZE IS GREATER THAN THE STANDARD MINIMUM SIZE.
4. APPROVED PRE-CAST CONCRETE BASES MAY BE USED INCORPORATING CHANNELS, BENCHING ETC. SUBJECT TO IRISH WATER REVIEW AND COMPLYING WITH BS 5911-PART 4 2002.
5. STRUCTURAL DESIGN AND REINFORCEMENT DETAILS TO BE PROVIDED BY THE DEVELOPER AND SUBMITTED TO IRISH WATER FOR REVIEW.
6. MANHOLES GREATER THAN 3m IN DEPTH WILL REQUIRE A DETAILED STRUCTURAL DESIGN AND BE SUBJECT TO IRISH WATER REVIEW.
7. MANHOLE ROOFS SHALL CONSIST OF A RE-INFORCED CONCRETE SLAB OF IN-SITU CONCRETE, C30/37, WITH A MINIMUM THICKNESS OF 225mm DESIGNED TO CARRY ALL LIVE AND DEAD LOADS. ALTERNATIVELY, APPROVED PRE-CAST CONCRETE ROOF SLABS MAY BE USED SUBJECT TO IRISH WATER REVIEW AND COMPLIANCE WITH BS 5911 PART 4: 2002.
8. COVERS AND FRAMES SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS SUBJECT TO REVIEW BY IRISH WATER.
9. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH AROUND COVERS IN GREEN AREAS.
10. ALL CHAMBERS TO BE CHECKED FOR UPLIFT BY THE DEVELOPER BASED ON GROUND CONDITIONS WITHIN THE SITE. SHOULD ANTI FLOATATION MEASURES BE REQUIRED THEY SHALL BE SUBJECT TO REVIEW BY IRISH WATER.
11. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206 : 2013.
12. ANY SPECIAL ROAD REINSTATEMENT AROUND COVER & FRAME SHALL BE TO ROAD AUTHORITY'S REQUIREMENTS.
13. NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS.
14. 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 I NFRASTRUCTURE IRELAND REQUIREMENTS.
15. IF DEPTH FROM GROUND TO PIPE SOFFIT IS GREATER THAN 6m DEEP, A SITE SPECIFIC ENGINEERED SOLUTION FOR ACCESS SHALL BE PROVIDED.
16. PROPRIETARY WATERTIGHT PCC MANHOLE RING SYSTEMS WITH A WALL THICKNESS > 125mm, & A WATER TIGHT JOINT SEALING SYSTEM, MAY BE USED WITHOUT CONCRETE SURROUND, SUBJECT TO THE GROUND WATER LEVEL AT THE MANHOLE BEING LOW, & SUBJECT TO REVIEW BY IRISH WATER.



LOCATION OF THIS TYPE OF MANHOLE RESTRICTED TO AREAS WHERE GRADE B CLASS 1 COVERS ARE USED

TYPICAL PRECAST SHALLOW MANHOLE DETAIL

SCALE 1:20/1:40

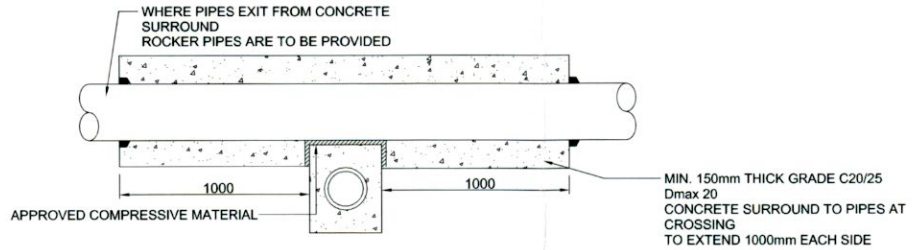


TYPICAL DETAIL AT PIPE CROSSING WITH ADEQUATE COVER

<1200mm COVER IN PAVED AREAS

<900mm COVER IN LANDSCAPED AREAS

(FOR GAPS BETWEEN PIPES OF LESS THAN 300mm
SCALE 1:20 /1:40



TYPICAL DETAIL AT PIPE CROSSING WITH SHALLOW COVER

<1200mm COVER IN PAVED AREAS

<900mm COVER IN LANDSCAPED AREAS

(FOR GAPS BETWEEN PIPES OF LESS THAN 300mm
SCALE 1:20 / 1:40

Notes:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
4. FOR GENERAL NOTES REFER TO DRAWING.
5. ALL FOUL DRAINAGE WORKS TO BE IN ACCORDANCE WITH IRISH WATERS' CODE OF PRACTICE FOR WASTEWATER SUPPLY AND WASTEWATER INFRASTRUCTURE STANDARD DETAILS.
6. FOUL SEWERS TO BE THERMOPLASTIC STRUCTURED WALL PIPES (COMPLYING WITH THE PROVISION OF IS EN 13476 AND WIS 4-35-01 2000 AND COMPLY WITH THE REQUIREMENTS OF THE IRISH WATER CODE OF PRACTICE.
7. WATERMAIN INSTALLATION AND ALL WATER SUPPLY WORKS TO BE IN ACCORDANCE WITH THE REQUIREMENTS OF IRISH WATERS CODE OF PRACTICE FOR WATER SUPPLY AND WATER INFRASTRUCTURE STANDARD DETAILS.
8. WATERMAINS TO BE TYPE HPPE, PE-100, SDR-17 RATED AND SHALL CONFORM TO IS EN 12201 (PART 1, PART 2, & PART 3).
9. WATERMAIN SERVICE CONNECTION PIPES TO BE HDPE (PE-80) MATERIAL WITH SDR-17 RATING).

REV	DESCRIPTION	BY	DATE
P01	ISSUED FOR PLANNING	RPH	24.08.22

STATUS: PLANNING

TENT ENGINEERING

PROJECT: LARKFIELD HOUSE

TITLE: TYPICAL DETAILS SHEET 2 of 3

SCALE AT A1:	DATE:	DRAWN	CHECKED
1 : 20	AUG 22	RPH	EH

DRAWING NO: 22074-TNT-XX-FN-DR-C- 92011 REVISION: P01