

REINFORCED

LIFTING DAVIT

SOCKET

-CORBEL

FLEXIBLE

∕COUPLING

ROOF SLAB

CONCRETE C30/37

VALVE CHAMBER COVER AND

SURFACE BOX -

REINFORCED CONCRETE

BASE GRADE C30/37

AND BS 7903 (MIN. 1400 x 800mm

FRAME SHALL COMPLY TO IS EN 124

GROUND LEVEL

FLAP VALUE ON VALUE CHAMBER

DISCHARGE ABOVE PUMP CUT-IN

LEVEL (AS PER PUMP SUPPLIER'S

BOTTOM PRECAST SECTION TO BE

-BUILT INTO BASE CONCRETE

FIRST RING BUILT INTO

IN-SITU CONCRETE BASE

REINFORCED CONCRETE

SECTION A-A

1:50@A3

BASE GRADE C30/37

75mm GRADE C12/15

BLINDING CONCRETE

SCALE 1:25@A1

MINIMUM 75mm

RECOMMENDATIONS)

DRAIN 80mmØ DUCTILE IRON TO

RISING MAIN TO

METER CHAMBER

1 TO 2 COURSES OF CLASS B

IN M30 MORTAR TO IS EN 998

REINFORCED CONCRETE

C30/37 ROOF SLAB

BAUER FITTING

PRECAST CONCRETE

420 IN CONJUNCTION

WITH IS EN 1917: 2004

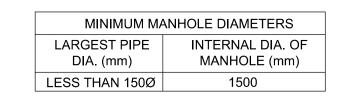
CONC. THRUST BLOCK TO BEND (REFER TO

DRG. NO. STD-WW-14

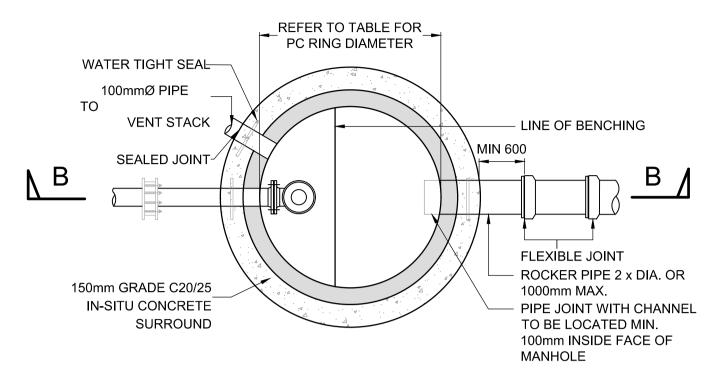
FOR DETAILS)

MANHOLE RINGS TO IS

SOLID ENGINEERING BRICK SET

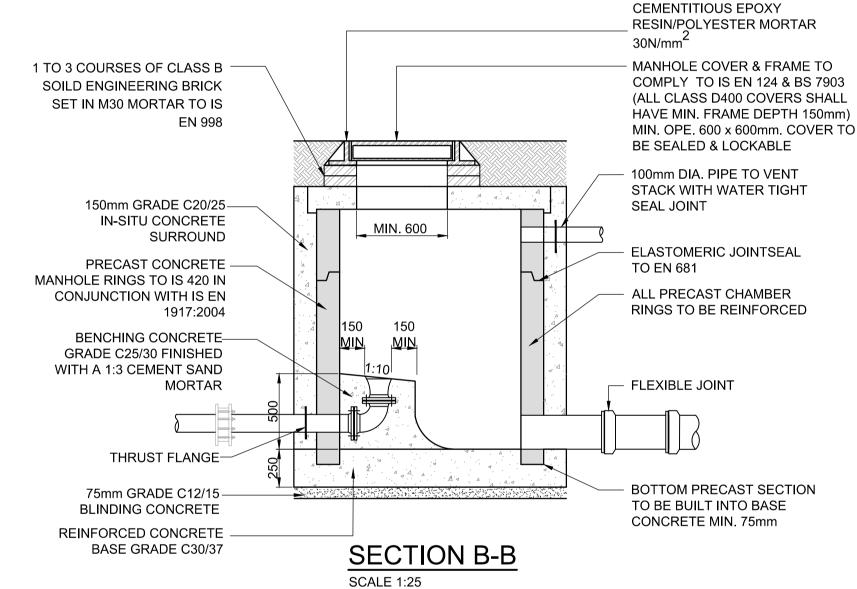


ROCKER PIPE LENGTH	
PIPE DIA. (mm)	ROCKER PIPE
	LENGTH (mm)
150 to 600	600
GREATER THAN 600 to 750	1000
GREATER THAN 750	1250



SECTIONAL PLAN SCALE 1:25@A1

1:50@A3



RISING MAIN DISCHARGE MANHOLE

IN ACCORDANCE WITH STD-W-29 REV 3 SCALE 1:25@A1 1:50@A3

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.

2. PUMPS SHALL BE INSTALLED TO IRISH WATER REQUIREMENTS.

3. ALL DUCTILE IRON PIPE WORK AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 598. 4. ALL GATE VALVES TO BE CLOCKWISE CLOSING.

5. WET WELL TO BE IN ACCORDANCE WITH BS EN 1992-3.

6. COVERS TO BE SIZED TO ALLOW ADEQUATE SPACE FOR PUMP REMOVAL MINIMUM 1400 x 800mm.

7.CHAMBER ACCESS COVERS WITH A CLEAR OPENING EXCEEDING 1m SHALL CONFORM TO BS 9124.

8. WALL THICKNESS AND REINFORCEMENT SHALL BE SELECTED BASED ON SITE SPECIFIC DESIGN AND SHALL BE SUBJECT TO APPROVAL OF IRISH WATER.

9. THE PUMPING STATION SHOULD NOT BE LOCATED IN AREAS THAT ARE SUSCEPTIBLE TO FLOODING AT MORE THAN A 1:30 YEAR RECURRENCE. THE PUMPING STATION FACILITY SHALL BE DESIGNED FOR INUNDATION. THE FINISHED SLAB LEVEL SHALL BE POSITIONED ABOVE THE 1:100 YEAR FLOOR LEVEL. ALL ELECTRICAL CONTROL EQUIPMENT SHALL BE IP RATED AND POSITIONED ABOVE 1:200 YEARS FLOOD LEVEL

10. ALL CONCRETE TO BE IN ACCORDANCE

WITH IS EN 206.

11. VENTILATION STACK TO BE PROVIDED IN SENSITIVE AREAS.

12. SURGE EQUIPMENT TO BE PROVIDED IF DEEMED NECESSARY.

COVER TO BE SET IN

13. INDICATIVE LAYOUT RELATES TO SMALL PUMPING STATIONS AS PER TYPE 1, TYPE 2 & TYPE 3 IN THE IRISH WATER CODE OF PRACTICE FOR WASTER INFRASTRUCTURE.

14. PROPRIETARY WATERTIGHT PRE-CAST CONCRETE SYSTEMS IN ACCORDANCE WITH IS EN 1992-3 TIGHTNESS CLASS 2, MAY BE USED SUBJECTED TO IW APPROVAL AS AN ALTERNATIVE. DEVELOPER SHALL PROVIDE DETAILS TO IRISH WATER FOR REVIEW. CONCRETE SURROUND, C30/35 CONCRETE TO IS 206, SHALL BE PROVIDED TO ANY JOINTS WITHIN THE PRECAST CONCRETE UNIT

15. HIGH LEVEL ALARM TO BE PROVIDED.

16. ALL PUMPING STATION AND RISING MAIN PIPEWORK TO BE PRESSURE TESTED IN ACCORDANCE WITH IRISH WATER CODE OF PRACTICE FOR WASTEWATER SUPPLY SECTION

17. IN-SITU CONCRETE SURROUND TO PCC MANHOLE UNITS TO BE INCREASED IN THICKNESS FOR PUMPING STATIONS >3.0m DEEP TO DESIGNERS REQUIREMENTS. STRUCTURAL DESIGN AND REINFORCEMENT DETAILS TO BE PROVIDED BY DEVELOPER AND SUBMITTED TO IRISH WATER FOR REVIEW.

NO DIMENSION SHALL BE SCALED FROM THIS DRAWING, ALL DIMENSIONS SHALL BE SITE CHECKED. THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS Notes :-

GENERAL NOTES :-

- ALL BRICK TO BE SOLID ENGINEERING BRICK CLASS A OR B
- FOR PIPE DIAMETER >750mm USE MANHOLE WITH INTERNAL DIAMETER SIZE = PIPE SIZE + 1 METRE +
- DISTANCE FROM THE TOP RUNG OF THE LADDER TO GROUND LEVEL MUST BE A MAXIMUM OF

IRISH WATER NOTES:

GENERAL NOTE ALL PIPEWORK, MANHOLES, CHAMBERS AND ASSOCIATED PIPEWORK TO BE CONSTRUCTED TO CURRENT IRISH WATER CODES OF PRACTICE AND STANDARD DETAILS

COVERS

MANHOLE COVERS AND FRAMES TO COMPLY WITH THE REQUIREMENTS OF IS/EN 124:1994 & BS 7903 COVERS IN SERVICE YARDS TO BE APPROVED MINIMUM CLASS E600 WITH 600mm CLEAR OPENINGS. ROADWAYS TO BE AN APPROVED MINIMUM CLASS D400 WITH 600mm CLEAR OPENING. COVERS IN GRASSED AREAS AND FOOTPATHS NOT ADJACENT TO ROADWAYS TO BE MINIMUM CLASS C250 WITH600mm CLEAR OPENING.

MANHOLE STEPS

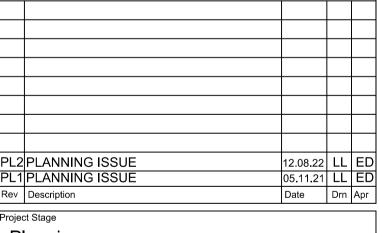
MANHOLE STEPS TO COMPLY WITH IS EN 13101, TYPE D, CLASS 1, GALVANISED MILD STEEL & PLASTIC ENCAPSULATED. STEPS ARE REQUIRED IN MANHOLES UP TO A DEPTH OF 2.5m.

ACCESS LADDERS ACCESS LADDERS TO BE MANUFACTURED

FROM MILD STEEL WITH 65mm x 12mm STRINGERS 300mm APART WITH 20mm DIAMETER RUNGS AT 300mm c/c. MILD STEEL STAYS 65mm x12mm TO BE PROVIDED AT INTERVALS NOT EXCEEDING 2.4m. LADDER AND STAYS TO BE HEAVILY GALVANISED TO BS 729 AFTER MANUFACTURE. THE LADDER IS TO BE FIXED WITH 18mm DIAMETER STAINLESS STEEL BOLTS. LADDERS ARE REQUIRED FOR MANHOLES WITH A DEPTH IN EXCESS OF 2.5m & ARE TO COMPLY WITH IS EN 14396 & WITH BS 4211.

BENCHING

1:3 CEMENT:SAND MORTAR WITH STEEL TROWEL FINISH AT A 1:30 SLOPE TOWARDS THE CHANNEL



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OMNI PLAZA SHD

CONSTRUCTION DETAILS SHEET 3

Job No. (Eir Eng) 1:25@A1 201121 1:50@A3 Checked Date Approved Bv Drawn By Checked By L Lonergan E Deasy 25.06.2021 T Byrne Drawing Number

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PL2

INDICATIVE PRE-CAST CONCRETE SUBMERSIBLE LIFTING STATION AND PRECAST **VALVE CHAMBER**

SCALE 1:25 @A1

1:50@A3

LIFT ASSISTED COVER

WITH SAFETY GRID.

PRECAST CONCRETE

MANHOLE RINGS TO IS

420 IN CONJUNCTION-

WITH IS EN 1917: 2004

WATER RESISTANT

INCOMING FOUL SEWER (THE CUT-IN LEVEL OF THE BELOW

THE INVERT LEVEL OF THE

SEWER INVERT LEVEL)

MIN. 150mm GRADE

CONCRETE SURROUND

C20/25 IN-SITU

BENCHING 45°

CUT-OUT LEVEL.

REQUIREMENTS

CONSTRUCTION -

DISTANCE TO BE IN

ACCORDANCE WITH

PUMP MANUFACTURERS

MIN. SLOPE

JOINT TO IS EN-

1992

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1800 (MIN.)

TO SUIT PUMP INSTALLATION

(OR IN ACCORDANCE WITH PUMP

MANUFACTURERS REQUIREMENTS)

PUMPING STATION

SEALED

DUCTS

ULTRA SONIC -

SENSOR

2 NO. 100Ø CABLE OPES

S/S BAFFLE

PLATE