SLUICE VALVE NOTES:

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

2. SLUICE VALVE CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS 261 OR BS 5834. COVER AND

FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO REVIEW BY IRISH WATER. 3. SLUICE VALVES SHALL BE RESILIENT SEATED AND SHALL COMPLY WITH BS 5163-1, BS 5163-2, IS EN 1074-1, IS EN 1074-2, OR EQUIVALENT E.U. SPECIFICATIONS.

4. ALL SLUICE VALVES SHALL BE ANTI-CLOCKWISE CLOSING.

5. VALVE CHAMBER TO BE CONSTRUCTED OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCKWORK. ALTERNATIVELY PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO REVIEW BY IRISH WATER. ROOF SLABS SHALL BE DESIGNED TO CARRY ALL LIVE LOADS & DEAD LOADS, & CONSIST OF A REINFORCED CONCRETE SLAB OF IN-SITU CONCRETE, GRADE C30/37, WITH A MINIMUM THICKNESS OF 150mm. ALTERNATIVELY, PRE-CAST CONCRETE ROOFS MAY BE USED, SUBJECT TO IRISH WATER REVIEW, & COMPLIANCE WITH BS 5911, Part 4.

6. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER STD-W-13. 7. DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545. PE PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS

EN 12201:2011.

8. 200mm ALL AROUND. 100mm DEEP CONCRETE PLINTH AROUND COVERS IN GREEN AREAS. 9. THRUST BLOCKS (NOT SHOWN ON DRAWING), TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES, BENDS, TAPERS,

DEAD ENDS AND PIPES AT STEEP SLOPES.

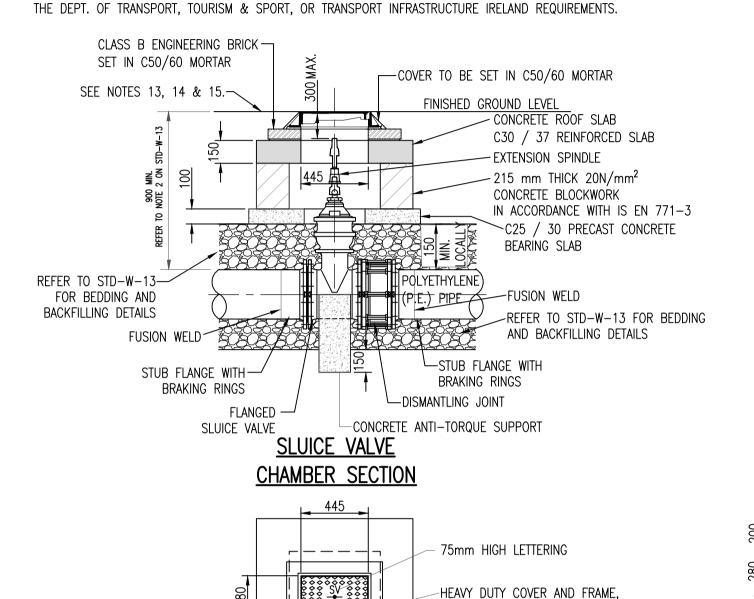
10. ANTI-CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.

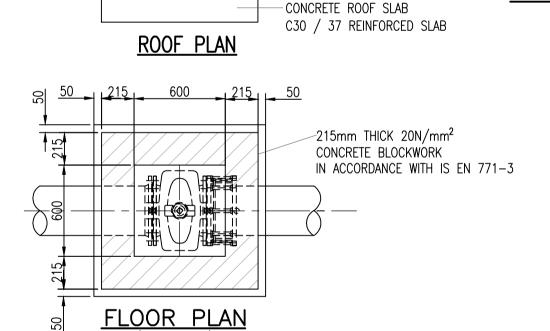
11. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206. 12. 450 x 450mm INTERNAL DIMENSION CHAMBERS MAY BE PROVIDED SUBJECT TO REVIEW BY IW. SUCH CHAMBERS SHALL BE PROVIDED WITH GRADE "A" HEAVY DUTY COVER & FRAME & STAMPED "SV".

13. ANY SPECIAL ROAD REINSTATEMENT AROUND COVER & FRAME SHALL BE TO ROAD AUTHORITY'S REQUIREMENTS.

14. NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS.

15. EXISTING ROAD REINSTATEMENT TO COMPLY WITH CURRENT VERSION OF "GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS" BY





STAMPED "SV" CLASS D400 (TO SUIT 445 x 280 OPE)

(SCALE 1:25)

SLUICE VALVE CHAMBER POLYETHYLENE (PE) PIPE (BLOCKWORK CONSTRUCTION)

88888888

HYDRANT NOTES:

ALL DIMENSIONS IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.

HYDRANT CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS 261 OR BS 5834 COVER AND FRAME

SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO REVIEW BY IRISH WATER. 3. ALL HYDRANTS, SURFACE BOX FRAMES & COVERS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF IS EN 14339, IS EN 1074-6 & BS 750. FIRE HYDRANTS SHALL BE TYPE 2. THE HYDRANT INLET SHALL BE 80mm DIAMETER WITH PN16.

4. ALL HYDRANTS SHALL BE CLOCKWISE CLOSING

5. HYDRANT CHAMBER TO BE CONSTRUCTED OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCKWORK. ALTERNATIVELY PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO REVIEW BY IRISH WATER. ROOF SLABS SHALL BE DESIGNED TO CARRY ALL LIVE LOADS & DEAD LOADS, & CONSIST OF A REINFORCED CONCRETE SLAB OF IN-SITU CONCRETE, GRADE C30/37, WITH A MINIMUM THICKNESS OF 150mm, ALTERNATIVELY, PRE-CAST CONCRETE ROOFS MAY BE USED. SUBJECT TO IRISH WATER REVIEW. & COMPLIANCE WITH BS 5911, Part 4.

6. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER STD-W-13. 7. DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545. PE PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 12201:2011

8. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH AROUND COVERS IN GREEN AREAS.

9. THRUST BLOCKS (NOT SHOWN ON DRAWING), TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES, BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.

10. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.

11. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.

12. ANY SPECIAL ROAD REINSTATEMENT AROUND COVER & FRAME SHALL BE TO ROAD AUTHORITY'S REQUIREMENTS.

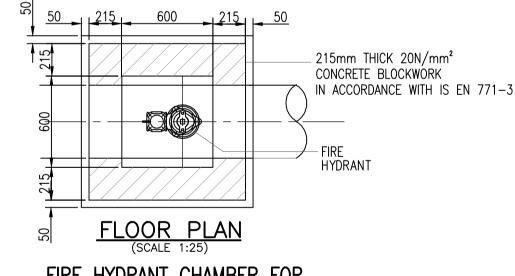
NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS.

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 INFRASTRUCTURE IRELAND REQUIREMENTS.

-COVER TO BE SET IN C50/60 MORTAR SEE NOTES 12. 13 & 14. <u>FINISHED GROUND LEVEL</u> CLASS B ENGINEERING BRICK—— SET IN C50/60 MORTAR _CONCRETE ROOF SLAB C30 / 37 REINFORCED SLAB 215mm THICK 20N/mm² CONCRETE BLOCKWORK IN ACCORDANCE WITH IS EN 771-3 826 ---PRECAST CONCRETE SLAB BEARING REFER TO STD - W- 13 FOR BEDDING AND BACKFILLING DETAILS DI DOUBLE FLANGED DN80 POLYETHYLENE RISER PIPE OF SUITABLE LENGTH (P.E.) PIPE TO SUIT SITE CONDITIONS (RISER CAN BE PE MATERIAL) FUSION WELD POLYETHYLENE TEE WITH FLANGED BRANCH OR ELECTRO FUSION SADDLE _____ 75mm HIGH -BULL NOSE ~l— — — —l ¬ LETTERING FINISH HEAVY DUTY COVER AND FRAME, -STAMPED "FH" CLASS D400 (TO SUIT 445 x 280 OPE) PLINTH DETAIL IN GRASS AREA - CONCRETE ROOF SLAB

ROOF PLAN

(SCALE 1:25)



C30 / 37 REINFORCED SLAB

FIRE HYDRANT CHAMBER FOR POLYETHYLENE (PE) PIPE (BLOCKWORK CONSTRUCTION STD-W-18

SCOUR VALVE NOTES:

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

STRUCTURAL REINFORCEMENT AND DESIGN DETAIL TO BE PROVIDED BY THE DEVELOPER AND SUBMITTED TO IRISH WATER FOR REVIEW. ROOF SLABS SHALL BE DESIGNED TO CARRY ALL LIVE LOADS & DEAD LOADS, & CONSIST OF A REINFORCED CONCRETE SLAB OF IN-SITU CONCRETE, GRADE C30/37, WITH A MINIMUM THICKNESS OF 225mm. ALTERNATIVELY, PRE-CAST CONCRETE ROOFS MAY BE USED, SUBJECT TO IRISH WATER REVIEW, & COMPLIANCE WITH BS 5911, Part 4.

CONCRETE FOR SCOUR CHAMBER AND HEADWALL TO BE C30 / 37. PREFABRICATED CHAMBER AND HEADWALL MAY ALSO BE USED, SUBJECT TO REVIEW FROM IRISH WATER.

SCOUR CHAMBER SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS EN 124 RATING D400. COVER AND FRAME

SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO REVIEW IRISH WATER. 200mm ALL ROUND, 100mm DEEP CONCRETE PLINTH AROUND COVERS IN GRASS AREAS.

FINAL DETAIL TO BE REVIEWED BY IRISH WATER AND RELEVANT REGULATORY AUTHORITIES.

8. THRUST BLOCKS (NOT SHOWN ON DRAWING). TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES, BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.

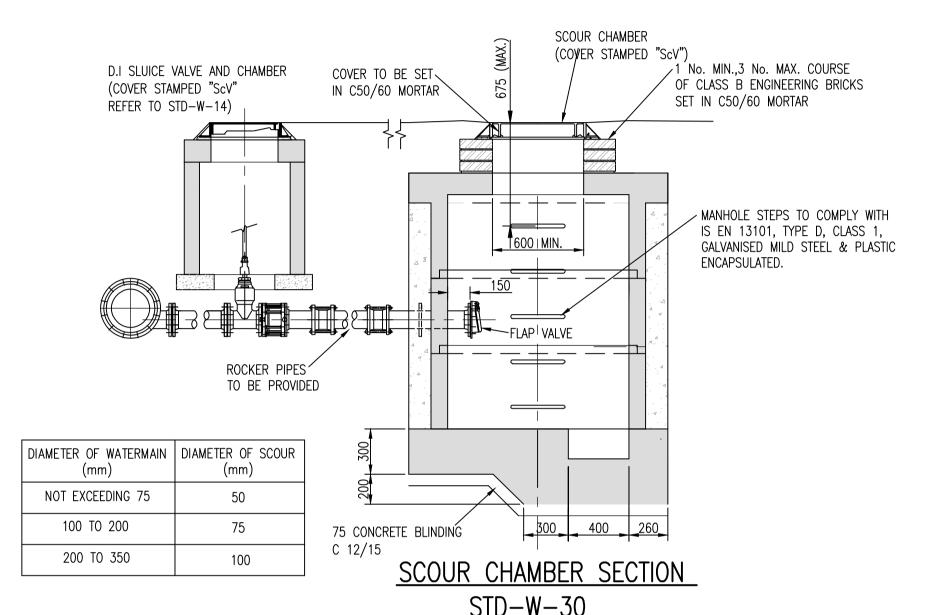
10. ALL PIPEWORK AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545. PE PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN

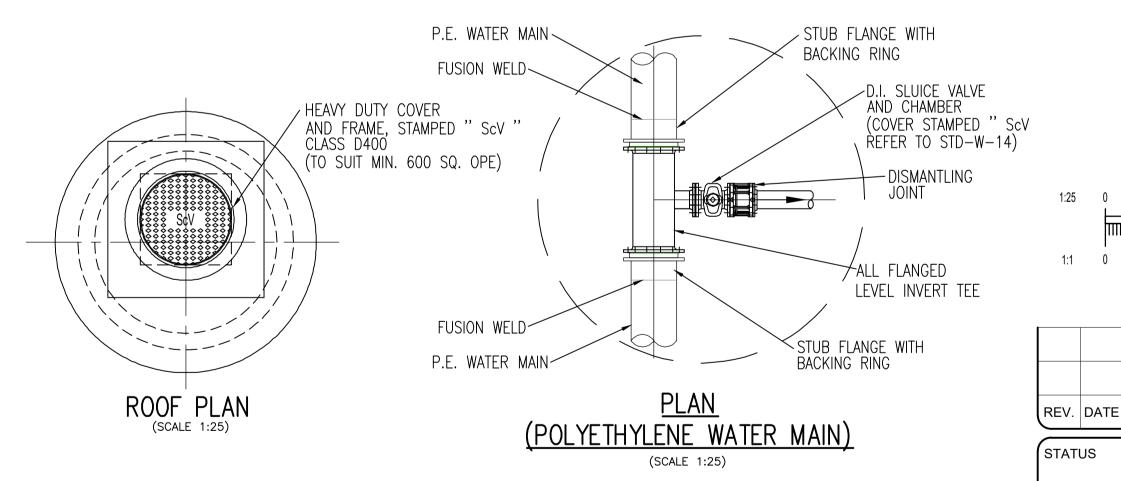
11. ALL CHAMBERS TO BE CHECKED FOR UPLIFT BY THE DEVELOPER BASED ON GROUND CONDITIONS WITHIN THE SITE, SHOULD ANTI

FLOATATION MEASURES BE REQUIRED THEY SHALL BE SUBJECT TO AGREEMENT WITH IRISH WATER.

12. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.

13. BACKFILL AND REINSTATEMENT OF RIVER BED AND BANK TO BE SUBJECT TO AGREEMENT WITH IRISH WATER & RELEVANT AUTHORITIES.





AIR VALVE NOTES: ALL DIMENSIONS IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE. AIR VALVE CHAMBERS SHALL BE COVERED WITH APPROVED VENTILATED HEAVY DUTY DUCTILE IRON COVERS TO IS EN 124 RATING D400. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO REVIEW BY IRISH WATER. 3. AIR VALVES SHALL COMPLY WITH THE REQUIREMENTS OF IS EN 1074-4. AIR VALVES SHALL BE DOUBLE ORIFICE TYPE AND SHALL INCLUDE AN ISOLATING VALVE. THE ISOLATING VALVE SHALL BE EITHER A GATE VALVE CONFORMING TO IS EN 1074-2 & SHALL BE OF A BOLTLESS

BONNET DESIGN, OR A BUTTERFLY VALVE TO IS EN 1074-2. 4. SERVICE CONNECTIONS SHALL NOT BE PROVIDED WITHIN 2m OF THE AIR VALVE LOCATION. AIR VALVE CHAMBERS TO BE OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCKWORK. ALTERNATIVE PROPRIETARY PREFABRICATED

CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO REVIEW BY IRISH WATER. PRECAST CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER STD-W-13. DUCTILE IRON PIPES / FITTINGS AND PE PIPES / FITTINGS TO BE IN ACCORDANCE WITH IS EN 545 AND IS EN 12201:2011.

8. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH AROUND COVERS IN GREEN AREAS. 9. THRUST BLOCKS (NOT SHOWN ON DRAWING), TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES, BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.

10. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.

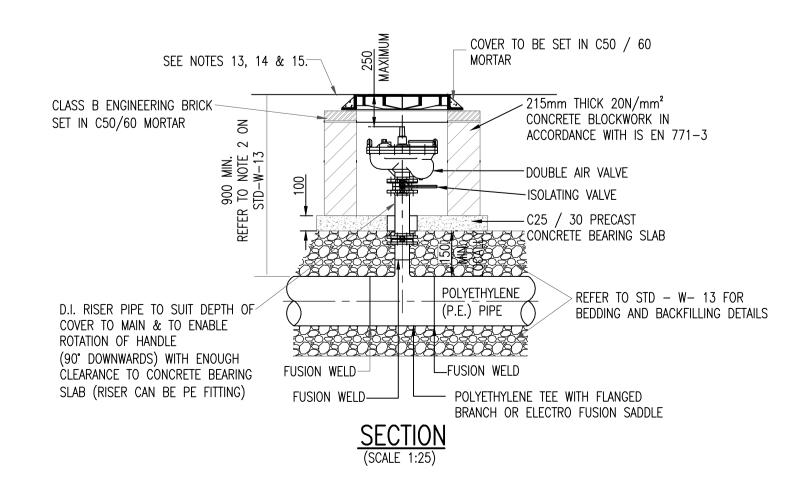
11. THE LOCATION OF THE AIR VALVE SHALL BE THE SUBJECT OF PARTICULAR AGREEMENT WITH IRISH WATER TO ENSURE THAT THE RISK OF CONTAMINATION THROUGH THE VALVE IS ELIMINATED.

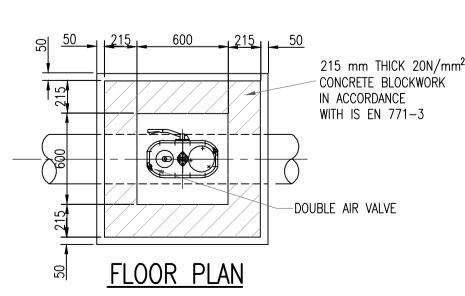
12. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.

13. ANY SPECIAL ROAD REINSTATEMENT AROUND COVER & FRAME SHALL BE TO ROAD AUTHORITY'S REQUIREMENTS.

14. NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS.

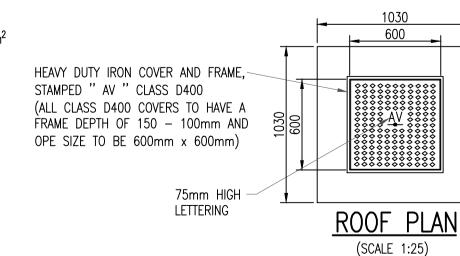
15. EXISTING ROAD REINSTATEMENT TO COMPLY WITH CURRENT VERSION OF "GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS" BY THE DEPT. OF TRANSPORT, TOURISM & SPORT, OR TRANSPORT INFRASTRUCTURE IRELAND REQUIREMENTS.





DOUBLE AIR VALVE FOR POLYETHYLENE (PE) PIPE (BLOCKWORK CONSTRUCTION) STD-W-22

(SCALE 1:25)



UP TO 250 (mm) | 250 TO 350 (mm) DIAMETER OF MAIN 100mm DIAMETER OF BRANCH 100mm BORE OF VALVE INLET

WATERMAIN SHALL BE IN ACCORDANCE WITH THE BEST CURRENT PRACTICE AND THE LATEST EDITIONS OF THE RELEVANT STANDARDS AND CODES OF PRACTICE.

1. DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.

ARCHITECTURAL AND ENGINEERING DRAWINGS.

WATERMAINS SHALL BE LAID IN ACCORDANCE WITH THE LOCAL AUTHORITY / IRISH WATER SPECIFICATION FOR THE LAYING OF NEW WATERMAINS AND BYLAWS WHICH OVER-RIDE THESE NOTES. THE CONSTRUCTION OF THE

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

4. WATERMAINS SHALL NOT BE LAID UNDER WALLS OR AREAS DESIGNATED FOR TREES/SHRUBS/FLOWERS.

PIPES SHALL BE HDPE (BLUE PIPE) UNLESS NOTED OTHERWISE BY AGREEMENT WITH THE LOCAL AUTHORITY. DUCTILE IRON PIPES SHALL BE USED UNDER ROADS OF CLASSIFICATION "DISTRICT DISTRIBUTOR" UPWARDS UNLESS NOTED OTHERWISE.

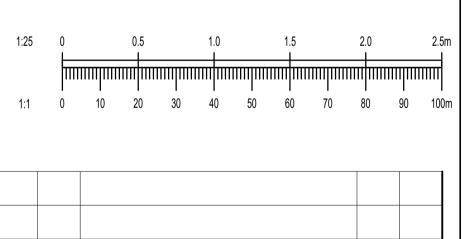
6. PIPES SHALL CONFORM TO THE UK WATER INDUSTRY SPECIFICATION OR EQUIVALENT E.U. SPECIFICATION.

7. DUCTILE IRON (DI) PIPES SHALL CONFORM TO IS EN 545 AND SHALL HAVE MINIMUM C40 PRESSURE RATING. DUCTILE IRON FITTINGS SHALL HAVE 16 BAR RATING AT LEAST DI PIPEWORK SHALL BE COATED INTERNALLY WITH A BLAST FURNACE CEMENT LINING WHICH COMPRISES WITH THE REQUIREMENTS OF BS 6920. EXTERNAL PROTECTION SHALL INCLUDE AN ALLOY OF 70NC AND ALUMINUM WITH A MINIMUM 15% ALUMINUM WITH OR WITHOUT OTHER MATERIALS HAVING A MASS OF 400g/m² COMPETE WITH A FINISHING LAYER OF BLUE FUSION BONDED EPOXY IN ACCORDANCE WITH IS EN 14901.

WATERMAINS SHALL BE LAID UNDER FOOTPATHS PREFERABLY OR GRASS MARGINS WHERE APPROVED. NO PIPE, CONDUIT, CABLE OR OTHER SERVICE SHALL BE LAID LONGITUDINALLY OVER THE LINE OF A WATERMAIN. NO CABINET POLES, JUNCTION BOXES OR CHAMBERS SHALL BE CONSTRUCTED OVER A WATERMAIN.

CONNECTIONS TO THE MAINS WHICH ARE THE PROPERTY OF THE IRISH WATER CAN BE MADE BY THE IRISH WATER ONLY. NO OTHER PERSON MAY INTERFERE IN ANY WAY WITH THESE MAINS. SUCH CONNECTIONS WILL BE MADE BY IRISH WATER AT THE EXPENSE OF THE PERSONS REQUIRING THEM. THE ESTIMATED COST OF SUCH CONNECTIONS MUST BE LODGED WITH IRISH WATER BEFORE THE WORK IS UNDERTAKEN.

10. IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT ALL WORKS ARE CONSTRUCTED IN ACCORDANCE WITH THE IRISH WATER CODE OF PRACTICE AND STANDARD DETAILS. THE CODE OF PRACTICE AND STANDARD DETAILS ARE AVAILABLE TO DOWNLOAD FROM THE IRISH WATER WEB SITE AT www.water.ie/connections/developer-services/ where the details CONTAINED ON THIS DRAWING DIFFER FROM THE IRISH WATER CODE OF PRACTICE OR STANDARD DETAILS THIS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY. IRISH WATER STANDARDS WILL TAKE PRECEDENCE



FOR PLANNING ONLY NOT FOR CONSTRUCTION

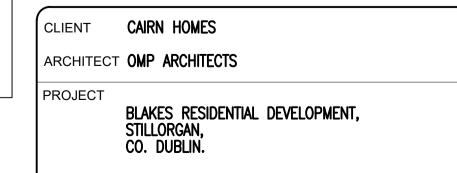
AMENDMENT

DRN APPO



Waterman Moylan **Engineering Consultants**

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TITLE PROPOSED WATER SUPPLY DETAILS SHEET 2 OF 3

DRAWN DESIGNED APPROVED DATE MAR' 22 G.Byrne FN JOB NO. DRG. NO. REVISION 1:25 **@**A1 20-071 © 2017. This drawing is copyright. No part of this document may be re-produced or transmitted in any form or stored in any retrieval system of any nature without the written permission of the consulting engineer as copyright holder except as agreed for use on the project for which the