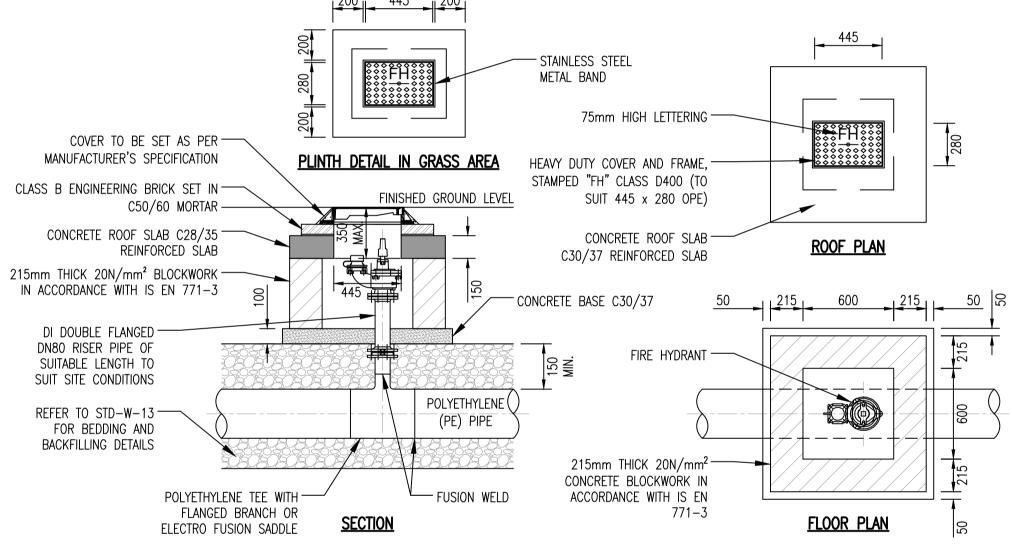


SLUICE VALVE NOTES:

- 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 AND BS 5834. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO THE APPROVAL OF 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 APPROVAL FROM IRISH WATER.
- 6. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER STD-W-13.
- 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 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE
- STAINLESS STEEL METAL BAND AROUND COVER IN GREEN AREAS. THRUST BLOCKS (NOT SHOWN ON DRAWING), TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES, BENDS, TAPERS, DEAD ENDS AND
- 10. ANTI-CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
- 11. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.

PIPES AT STEEP SLOPES.

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



HYDRANT NOTES:

- 1. ALL DIMENSIONS IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- HYDRANT CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS EN 261 AND BS 5834 COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO THE APPROVAL OF IRISH WATER.
- 3. ALL HYDRANTS, SURFACE BOX FRAMES & COVERS SHALL COMPLY WITH THE RELEVANT PROVISIONS OF IS EN 14339. IS EN 1074-6 & BS750. 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 APPROVAL FROM IRISH WATER
- 6. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER STD-W-13.
- 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
- 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE
- STAINLESS STEEL METAL BAND AROUND COVERS IN GREEN AREAS. THRUST BLOCKS (NOT SHOWN ON DRAWING), TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES, BENDS, TAPERS, DEAD ENDS AND
- 10. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
- 11. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.

PIPES AT STEEP SLOPES.

ON-LINE FIRE HYDRANT CHAMBER FOR POLYETHYLENE (PE) PIPE (BLOCKWORK CONSTRUCTION)

600 DIAMETER OF BRANCH 80mm 100mm BORE OF VALVE INLET 80mm 100mm 75mm HIGH LETTERING -COVER TO BE SET AS PER -HEAVY DUTY IRON COVER AND FRAME, STAMPED -"AV" CLASS D400 (ALL CLASS D400 COVERS TO MANUFACTURER'S SPECIFICATION HAVE A MINIMUM FRAME DEPTH OF 150mm AND CLASS B ENGINEERING BRICK SET IN -OPE SIZE TO BE 600mm x 600mm) C50/60 MORTAR FINISHED GROUND LEVEL 215mm THICK 20N/mm² BLOCKWORK ⁻ IN ACCORDANCE WITH IS EN 771-3 **ROOF PLAN** — DOUBLE AIR VALVE D.I. RISER PIPE TO SUIT DEPTH OF -- ISOLATING VALVE COVER TO MAIN & TO ENABLE ROTATION OF HANDLE (90° DOWNWARDS) WITH CONCRETE BASE C25/30 ENOUGH CLEARANCE TO CONCRETE FLOOR SLAB DOUBLE AIR VALVE POLYETHYLENE (REFER TO STD-W-13 (PE) PIPE FOR BEDDING AND BACKFILLING DETAILS 215mm THICK 20N/mm² CONCRETE BLOCKWORK IN POLYETHYLENE TEE WITH -FUSION WELD ACCORDANCE WITH IS EN FLANGED BRANCH OR 771–3

UP TO 250mm 250mm TO 350mm

DIAMETER OF MAIN

ELECTRO FUSION SADDLE

DOUBLE AIR VALVE FOR POLYETHYLENE (PE) PIPE (BLOCKWORK CONSTRUCTION)

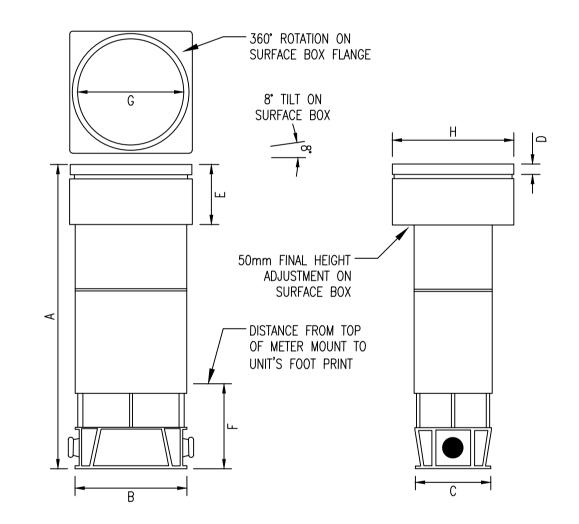
SCALE 1:25

FLOOR PLAN

AIR VALVE NOTES:

- 1. ALL DIMENSIONS IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
- AIR VALVE CHAMBERS SHALL BE COVERED WITH APPROVED VENTILATED 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 THE APPROVAL OF IRISH WATER.
- 3. AIR VALVES SHALL BE COMPLY WITH THE REQUIREMENTS OF IS EN 1074-4, AIR VALVE SHALL BE DOUBLE ORIFICE TYPE AND SHALL INCLUDE AN ISOLATING. THE ISOLATING VALVE SHALL BE A GATE CONFORMING IS EN 1074-2 & SHALL BE OF A BOLTLESS BONNET DESIGN
- 4. THE AIR VALVES SHALL HAVE BODIES AND COVERS OF CAST IRON TO BS 1563 WITH FLANGES DRILLED TO PN 16 IN ACCORDANCE WITH BS EN 1092. EACH VALVE SHALL HAVE A LARGE AND A SMALL AIR ESCAPE ORIFICE WITH AN ISOLATING VALVE.
- 5. SERVICE CONNECTIONS SHALL NOT BE PROVIDED WITHIN 2m OF THE AIR VALVE LOCATION.
- AIRVALVE CHAMBERS TO BE OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCKWORK. ALTERNATIVE PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO APPROVAL FROM 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. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH WITH PROTECTIVE
- STAINLESS STEEL METAL BAND AROUND COVERS IN GREEN AREAS. 10. 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. 11. ANTI CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
- 12. 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.
- 13. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.

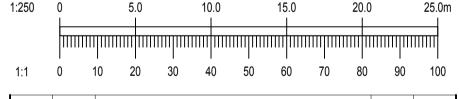
DIMENSIONS AND DETAILS										
BOX TYPE	A (MIN.)	A (MIN.)	В	С	D	E	F	G	Н	WEIGHT
STANDARD UNIT (20mm, 25mm AND 32mm CONNECTIONS)	499mm	870mm	208mm	151mm	20mm	112mm	170mm	173mm	225mm	4.5kg
SHORT UNITS	310mm	545mm	208mm	151mm	20mm	112mm	170mm	173mm	225mm	3.4kg
MATRIX CAN BE SUPPLIED TO SUIT IMPERIAL PIPES INCLUDING IRISH HEAVY GAUGE AND NORMAL GAUGE IMPERIAL PIPES										

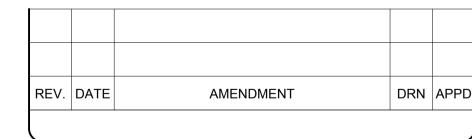


PROPOSED WATER SUPPLY BOUNDARY BOX DETAILS

NOTES:

- 1. DO NOT SCALE. USE FIGURED DIMENSIONS ONLY.
- 2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS.
- 3. 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 WATERMAIN SHALL BE IN ACCORDANCE WITH THE BEST CURRENT PRACTICE AND THE LATEST EDITIONS OF THE RELEVANT STANDARDS AND CODES OF
- 4. WATERMAINS SHALL NOT BE LAID UNDER WALLS OR AREAS DESIGNATED FOR TREES/SHRUBS/FLOWERS.
- 5. ALL PIPE MATERIALS SHALL BE IN ACCORDANCE WITH SECTION 3.9 OF THE IRISH WATER CODE OF PRACTICE FOR WATER INFRASTRUCTURE. WATERMAINS SHALL BE EITHER DUCTILE IRON (DI) OR POLYETHYLENE (PE), WITH PE80 OR PE100 RATING (MDPE, HDPEOR HPPE). ALL PLASTIC WATER PIPES SHALL BE BLUE IN COLOUR.
- 6. ALL SERVICE CONNECTIONS TO BE 25\(\phi\) HDPE(SDR-17).
- 7. ALL WATERMAINS UNDER ROADS OR AT ROAD CROSSINGS TO BE HDPE OR DUCTILE IRON.
- 8. HDPE DISTRIBUTION PIPES TO BE PE-100(SDR-17).
- 9. DUCTILE IRON PIPES TO IS EN 545 WITH C40 POWER RATING.
- 10. AIR VALVE AND HYDRANTS COVERS, WHERE LOCATED IN GRASS AREAS, SHALL BE SURROUNDED BY A CONCRETE PLINTH, 200mm ALL ROUND AND 100mm DEEP FORMED WITH C20/25 CONCRETE, 20mm AGGREGATE SIZE, BEDDED IN CLAUSE 804 MATERIAL. THE PLINTH SHALL INCORPORATE MILD STEEL REINFORCED LINKS AND SHALL HAVE BULL-NOSE FINISH AROUND ITS EXTERNAL PERIMETER.
- 11. THRUST BLOCKS SHALL BE PROVIDED AT EACH BEND ALONG THE COURSE OF THE WATERMAIN.
- 12. PLANTING ADJACENT TO WATER INFRASTRUCTURE SHALL COMPLY WITH IRISH WATER STANDARD DETAIL STD-W-12A.
- 13. HORIZONTAL AND VERTICAL SERVICE LAYOUT DISTANCES SHALL BE AS PER IRISH WATER STANDARD DETAIL STD-W-11.
- 14. 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.
- 15. THE MINIMUM COVER TO A WATERMAIN SHALL BE 750mm, THE MAXIMUM COVER SHALL BE 900mm UNLESS NOTED OTHERWISE.
- 16. 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.
- 17. IT IS THE CONTRACTOR'S 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.





STATUS FOR PLANNING **NOT FOR CONSTRUCTION**



Waterman Moylan **Engineering Consultants**

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ARCHITECT JOHN FLEMING ARCHITECTS **PROJECT** PROPOSED SHARED LIVING STRATEGIC HOUSING DEVELOPMENT AT WESTERN WAY. PHIBSBOROUGH TITLE

WATERMAIN CONSTRUCTION DETAILS SHEET 2 OF 3

DRAWN PJD	DESIGNED SDN	APPROVED MD	DATE MAY 2020
SCALE AS SHOWN	JOB NO. 18-039	DRG. NO. P311	REVISION -

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Nov 04, 2020 - 9:25am Drawing Location: M:\Projects\18\18-039 - Constitution Hill, Dublin 7\Drawings\Waterman Moylan\Civil\Planning\Autocad Drawings\18-039-P310-P311-P312 Watermain Details.dwg

SECTION