A1	

CLAUSE 804/808 MATERIAL IN
ACCORDANCE WITH THE NATIONAL ROADS
AUTHORITY SPECIFICATION FOR ROAD
WORKS IS TO BE USED AS BACKFILL
MATERIAL WHERE THE WATER MAIN IS
LOCATED IN ROADS, FOOTPATHS OR WHEN
THE NEAREST PART OF THE TRENCH IS
WITHIN 1m OF THE PAVED EDGE OF THE
ROADWAY. CLAUSE 804/808 IS TO BE
COMPACTED AS PER CLAUSE 802 OF THE
NATIONAL ROADS AUTHORITY SPECIFICATION
FOR ROAD WORKS. CLAUSE 808 IS TO BE
USED WITHIN 500mm OF CEMENT BOUND
MATERIALS, CONCRETE PAVEMENTS,
CONCRETE STRUCTURES OR CONCRETE
PRODUCTS. OTHERWISE CLAUSE 804 MAY BE
USED. ALTERNATIVE BACKFILL MATERIAL TO
THAT DESCRIBED ABOVE (CLAUSE 804 OR
CLAUSE 808) OF THE PIPE TRENCH WILL
ONLY BE ALLOWED BY IRISH WATER WHERE
THE ROADS AUTHORITY IN WHOSE
FUNCTIONAL AREA THE DEVELOPMENT IS ALL DIMENSIONS IN MILLIMETRES (mm)
UNLESS NOTED OTHERWISE.
CONCRETE THRUST BLOCKS (ANCHORAGE)
SHALL BE POSITIONED SYMMETRICALLY WITH
RESPECT TO THE CONNECTING PIPE & DETAIL 06 - WATER MAIN THRUST AND SUPPORT BLOCKS THE MINIMUM DEPTH OF COVER FROM THE FINISHED GROUND LEVEL TO THE EXTERNAL CROWN OF THE PIPE SHALL BE 900mm WHERE THE PIPE IS TO BE LOCATED IN HOUSING ESTATE ROADS. GREATER DEPTHS OF COVER AND/OR PIPE STRENGTH AND/OR A HIGHER CLASS OF BEDDING MATERIAL MAY BE REQUIRED WHERE HIGH TRAFFIC LOADING IS ANTICIPATED. THE DESIRABLE COVER FOR A WATERMAIN SHOULD BE 1200mm, WHERE PRACTICABLE & SHOULD NOT EXCEED 3.0m. COMPRESSIBLE FILLER FOR CONCRETE PROTECTION TO BE IN ACCORDANCE WITH BS EN 622-4.
BITUMINOUS MATERIAL SHALL NOT BE PUT IN CONTACT WITH PLASTIC PIPES. THE THICKNESS OF COMPRESSIBLE FILLER FOR MAINS < 450mm IN DIAMETER IS TO BE THRUST BLOCKS SHALL BEAR ON UNDISTURBED SOIL. IF FOR ANY REASON THEY CANNOT THEN THE DEVELOPER SHALL NOTIFY IRISH WATER IMMEDIATELY WITH A PROPOSED SOLUTION. THRUST BLOCKS ARE DESIGNED FOR AN AVERAGE BEARING PRESSURE OF 100KN/m (TYPICAL FOR SOFT CLAY) FOR OTHER CONDITIONS. ACTUAL DIMENSIONS MAY BE ALTERED ON INSTRUCTIONS FROM IRISH WATER. TRENCH DIMENSIONS: REFER TO DRAWING 01. ALL DIMENSIONS ARE IN MILLIMETRES (mr UNLESS NOTED OTHERWISE. CONCRETE IN THRUST BLOCKS SHALL BE GRADE C20/25. R TEST PRESSURES GREATER THAN 18 R, THRUST BLOCK DESIGN IS TO BE SMITTED TO IRISH WATER FOR REVIEW. BLOCK REINFORCEMENT REQUIRES DESIGN. TRENCH BACKFILL & BEDDING 12. 10. 1. POLYETHYLENE PIPES SHALL BE WRAPPED IN PLASTIC SHEETING HAVING A COMPOSITION IN ACCORDANCE WITH BS 6076 BEFORE BEING CAST INTO CONCRETE.

2. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206. SELECTED EXCAVATED MATERIAL MAY BE
USED IN GREEN-FIELD AREAS ABOVE
GRANULAR PIPE SURROUND MATERIAL
SUBJECT TO REVIEW BY IRISH WATER.

PIPE BEDDING SHALL COMPLY WITH WIS
4-08-02 AND IGN 4-08-01 GRANULAR
MATERIAL SHALL BE 14mm TO 5mm
GRADED AGGREGATE OR 10mm SINGLE
SIZED AGGREGATE TO IS EN 13242.

IN SOFT GROUND CONDITIONS (CBR <5) THE
MATERIAL SHOULD BE EXCAVATED OUT AND
DISPOSED OF IN ACCORDANCE WITH THE
WASTE MANAGEMENT ACT AND CLAUSE
804/808 MATERIAL IN ACCORDANCE WITH
THE NATIONAL ROADS AUTHORITY
SPECIFICATION FOR ROADS WORKS SHALL
REPLACE THE EXCAVATED MATERIAL,
WRAPPED IN GEO-TEXTILE WRAPPING.
ALTERNATIVELY, SPECIAL PIPE SUPPORT
ARRANGEMENTS, INCLUDING PILING ETC.
MAY BE REQUIRED WHERE THE DEPTH OF
SOFT MATERIAL IS EXCESSIVE. SUCH
ARRANGEMENTS SHALL BE SUBJECT TO
ASSESSMENT BY IRISH WATER BEFORE
ADVANCING WITH THE WORK. PIPES SHALL NOT BE SUPPORTED ON STONES OR ROCKS, OR ANY HARD OBJECT AT ANY POINT ALONG THE TRENCH. ROCK SHALL BE EXCAVATED TO A DEPTH OF 150mm BELOW THE ACTUAL DEPTH OF THE TRENCH WITH THE VOID FILLED WITH CLAUSE 804/808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS. THE GRANULAR MATERIAL SHALL BE LAID ABOVE THIS VOID BACKFILL MATERIAL. CONCRETE THRUST BLOCKS FOR POLYETHYLENE PIPE TO COMPLY WITH THE MANUFACTURER'S REQUIREMENTS. LOCATED, PROVIDES <u>WRITTEN APPROVAL</u> THE DEVELOPER TO THE USE OF SUCH ALTERNATIVE MATERIAL. 4. FOR HYDRANT PLATE ALL CHARACTERS SHOULD BE BLACK AND THE REMAINDER OF THE FRONT FACE SHOULD CONFORM TO COLOUR REFERENCE No. 309 (CANARY YELLOW) OF BS 381C. 12. MAY BE <500mm SUBJECT TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY & CONSTRUCTION ACCESS REQUIREMENTS.

NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS. 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. MARKER TAPE TO BE 400mm WIDE BLUE POLYETHYLENE MATERIAL IN ACCORDANCE WITH EN 12163, PLASTIC PIPES SHALL HAVE WARNING TAPE INCORPORATING A REINFORCED BAND BRACING WIRE. SERVICE PIPES SHALL HAVE 200mm WIDE MESH TAPE. MARKER TAPE TO BE LAID AT TOP OF PIPE BEDDING LAYER. PIPE DIAMETER ON HYDRANT PLATE TO REFER TO WATERMAIN NOT BRANCH.

SLUICE VALVE, AIR VALVE, SCOUR VALVE, WASHOUT HYDRANT AND METER PLATES SHOULD BE CAST IRON. ALL CHARACTERS SHOULD BE BLACK ON WHITE PAINT BACKGROUND. ALTERNATIVE MATERIAL MAY BE USED SUBJECT TO ACCEPTANCE BY DETAIL 07 - MARKER POSTS/PLATES ALL CONCRETE TO BE IN ACCORDANCE IS EN 206. CONCRETE SURROUND TO MARKER POST TO BE GRADE C25/30 AND IN ACCORDANCE WITH IS EN 206/2013. MARKER PLATES TO BE MANUFACTURED IN ACCORDANCE WITH BS 3251. WHERE PRACTICAL MARKER PLATES SHALL
BE FIXED TO ADJACENT WALLS OR
ALTERNATIVELY ATTACHED TO MARKER PLASTIC MARKER POSTS ARE NOT ACCEPTABLE. PLATES TO BE FIXED IN POSITION USING WALL PLUGS AND STAINLESS STEEL 3CREWS. BOUNDARY BOX NOTES:

1. THE BOUNDARY BOX 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.

CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER DRAWING 01. 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.

ALL HYDRANTS SHALL BE CLOCKWISE CLOSING 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. DETAIL 02 - ON-LINE HYDRANT FOR POLYETHYLENE (P.E.) PIPE GENERAL NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS (mm)
UNLESS NOTED OTHERWISE. ELECTRO FUSION COUPLING TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206. THE BOUNDARY BOX IS TO BE IN
ACCORDANCE WITH THE IRISH WATER
SPECIFICATION, INCORPORATING ALL A G1.5
MANIFOLD, STOP-TAP, FROST PLUG &
NON-RETURN VALVE.

THE BOUNDARY BOX SHALL BE POSITIONED
IN PUBLIC SPACE & AS CLOSE AS POSSIBLE
TO THE PROPERTY BOUNDARY BUT NO PART
OR FITTING TO BE WITHIN 225mm OF THE
PROPERTY LINE. THE SURFACE BOX COVER ON THE
BOUNDARY BOX SHOULD NOT BE LESS THAN
GRADE C (BS 5834: 2-2011): & THE
BOUNDARY BOX SHOULD BE LOCATED SUCH
THAT HEAVIER GRADES OF COVER WOULD
NOT BE REQUIRED. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE. THE BOUNDARY BOX SHALL BE LOCATED WHERE IT IS SAFE TO OPEN THE COVER & ACCESS THE STOP TAP OR VISUALLY READ THE METER, i.e. ON A FOOTPATH OR VERGE, & NOT IN A CARRIAGEWAY. FOR CONNECTION TO AN EXISTING MAIN THE CONNECTION SHALL BE AS PER THE PIPE MANUFACTURER'S SPECIFICATION. DETAIL 08 — CUSTOMER CONNECTION AND BOUNDARY BOX (25mm OD PIPE) 1. 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. THRUST BLOCKS (NOT SHOWN ON DRAWING),
TO BE PROVIDED AS PER STANDARD
DRAWING 06 AT ALL TEES, BENDS, TAPERS,
DEAD ENDS AND PIPES AT STEEP SLOPES.

ANTI-CORROSION TAPE TO BE PROVIDED
AROUND BURIED FLANGES. . NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS. ALL CONCRETE TO BE I THE BOUNDARY BOX SHALL BE INSTALLED HYGIENICALLY & LEFT CLEAN & FREE OF CONSTRUCTION WASTE OR DIRT FOR LATER METER INSTALLATION BY IRISH WATER.

3. BOX TO BE FOUNDED ON 100mm DEPTH OF C12/15 CONCRETE AND SURROUNDED WITH CLAUSE 808 GRANULAR MATERIAL.

THE DESIRABLE MINIMUM COVER FROM THE FINISHED GROUND LEVEL TO THE EXTERNAL CROWN OF A SERVICE CONNECTION SHALL BE 750mm WITH AN ABSOLUTE MINIMUM DEPTH OF 600mm FOR SHORT DISTANCES (SUBJECT TO IRISH WATER AGREEMENT). THE IHE BOUNDARY BOX IS TO BE INSTALLED AT A MINIMUM DEPTH OF 600mm (+/- 25mm) TO THE CROWN OF THE INLET & OUTLET FITTINGS ON THE OUTSIDE OF THE BOX.

THE SERVICE CONNECTION PIPE SHALL NOT BE WRAPPED AROUND THE SHAFT OF THE BOUNDARY BOX OR BENT IN ANY RADIUS LESS THAN THAT APPROVED BY THE MANUFACTURER. ANY SPECIAL ROAD REIN AROUND COVER & FRAM ROAD AUTHORITY'S REQU HE PIPE FITTINGS TO THE BOUNDARY BOX HALL BE APPROVED BY THE BOUNDARY OX MANUFACTURER. OF THE BOUNDARY BOX IS TO D VERTICALLY, & THE SURFACE INCLINED TO MATCH THE AND FITTINGS TO BE IN EN 545. PE PIPES IN ACCORDANCE WITH BUTION PIPEWORK WITHIN ULD BE SUITABLY SIZED FLOW FROM 20mm SERVICE PIPE. INSTATEMENT ME SHALL BE TO QUIREMENTS. 100mm DEEP UND COVERS IN N ACCORDANCE WITH M COVER FROM THE
L TO THE EXTERNAL
CONNECTION SHALL
3SOLUTE MINIMUM
SHORT DISTANCES
TER AGREEMENT). THE
DYER FOR A SERVICE
JLD BE 1200mm, SPECIFIC SEPARATION CLEARANCE
DISTANCES IN EXCESS OF THESE MINIMA
SHALL BE PROVIDED FOR SERVICES SUCH
AS GAS, ELECTRICITY, FIBRE-OPTIC OR OIL
FILLED CABLES AS THE CASE MAY BE. THE
PARTICULAR UTILITY PROVIDERS SHALL BE
CONSULTED TO DETERMINE THESE MINIMUM
SEPARATION DISTANCES AND EVIDENCE OF
THIS CONSULTATION, WITH THE SPECIFIED
SEPARATION DISTANCES, SHALL BE
PROVIDED TO IRISH WATER AT DESIGN 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. DIAMETER GREATER THAN 300mm.

ANY PROPOSED PIPE CROSSING SHOULD BE LOCATED MID-WAY BETWEEN THE WATER JOINTS WITH MINIMUM CLEAR DISTANCE OF 300mm AND UP TO 500mm. ALL CROSSINGS SHOULD BE AT LEAST 500mm AWAY FROM FITTINGS OR JOINTS. DETAIL 03 —ON—LINE AIR VALVE FOR POLYETHYLENE (P.E.) PIPE DETAIL 09 — TYPICAL SERVICE LAYOUT INDICATING SEPARATION DISTANCES PRECAST CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER DRAWING 01. 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. 300mm TO DISTRIBUTION MAINS OF LESS
THAN 300mm DIAMETER.
500mm TO TRUNK MAINS BETWEEN 300mm
AND 450mm DIAMETER.
3m TO ARTERIAL WATER MAINS OF
GREATER THAN 450mm DIAMETER. 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 DUCTILE IRON PIPES/FITTINGS AND PE PIPES/FITTINGS TO BE IN ACCORDANCE WITH IS EN 545 AND IS EN 12201:2011. WATERMAIN (PROPOSED) SEPARATION DISTANCES THE SEPARATION DISTANCES OUTLINED ARE MINIMUM REQUIREMENTS. SERVICE CONNECTIONS SHALL NOT BE PROVIDED WITHIN 2m OF THE AIR VALVE LOCATION. 300mm TO DISTRIBUTION MAINS OF LESS THAN 300mm DIAMETER. 15. 500mm AT EITHER SIDE OF MAINS UP TO AND INCLUDING 200mm IN DIAMETER.

1m AT EITHER SIDE OF MAINS OF 225mm TO 250mm DIAMETER.

2m AT EITHER SIDE OF MAINS OF 300mm AND 375mm IN DIAMETER.

5m AT EITHER SIDE OF MAINS OF 400mm AND 450mm IN DIAMETER.

SPECIFIC IRISH WATER ADVISED DISTANCES FOR MAINS IN EXCESS OF 475mm DIAMETER. WHERE DUCTS OR PIPES ARE TO BE LAID CLOSE TO AN EXISTING WATERMAIN OR SEWER IN THE OWNERSHIP OF IRISH WATER, NOTIFICATION IN WRITING SHALL BE PROVIDED A MINIMUM OF 10 DAYS AHEAD OF ADVANCEMENT OF THE WORK. WITH CURRENT VERSION OF 'GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS' BY THE DEPT. OF TRANSPORT, TOURISM & SPORT, OR TRANSPORT INFRASTRUCTURE IRELAND REQUIREMENTS. 2000mm AT EITHER SIDE OF EXISTING MAINS OF 250mm TO 350mm DIAMETER.
5000mm AT EITHER SIDE OF EXISTING MAINS OF DIAMETER GREATER THAN 350mm DIAMETER. NOTIFICATION IN WRITING IS REQUIRED SHOULD WORKS BE WITHIN THE FOLLOWING DISTANCES FROM AN EXISTING WATERMAIN OR WASTEWATER RISING MAIN: THRUST BLOCKS (NOT SHOWN ON DRAWING),
TO BE PROVIDED AS PER STANDARD
DRAWING 06 AT ALL TEES, BENDS, TAPERS,
DEAD ENDS AND PIPES AT STEEP SLOPES.
ANTI-CORROSION TAPE TO BE PROVIDED
AROUND BURIED FLANGES. 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. NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS. NOTIFICATION IN WRITING IS REQUIRED SHOULD WORKS BE WITHIN 1.5m DISTANCE OF A WASTEWATER SEWER. WATERMAIN (EXISTING) SEPARATION DISTANCES 1000mm AT EITHER SIDE OF EXISTING MAINS LESS THAN OR EQUAL TO 200mm DIAMETER. ANY SPECIAL ROAD REINSTATEMENT AROUND COVER & FRAME SHALL BE TO ROAD AUTHORITY'S REQUIREMENTS. CRETE TO BE IN ACCORD. AROUND, 100mm DEEP LINTH AROUND COVERS IN DETAILED PROPOSALS, INCLUDING WORK
METHOD STATEMENTS, INSURANCE
CONFIRMATION AND DETAILS OF WORK
COMPLETED OF A SIMILAR NATURE MUST BE
SUBMITTED TO IRISH WATER FOR REVIEW.
ALL SUCH WORKS IN THE VICINITY OF
ARTERIAL WATER MAINS AND SEWER (MAINS
GREATER THAN 400mm) SHALL BE SUBJECT
TO WRITTEN AGREEMENT WITH IRISH WATER
BEFORE CONSTRUCTION COMMENCES ON
SITE. THIS AGREEMENT SHALL ALSO
INCLUDE ANY NECESSARY PROTECTION FOR REQUIREMENTS SHALL ALSO APPLY TO
TRIAL HOLES OR SLIT TRENCHES TO LOCATE
THE MAIN OR GAIN GROUND INFO DATA.
LARGER DIAMETERS >300mm DISTRIBUTION
AND TRUNK MAINS, IRISH WATER MUST BE
NOTIFIED AT LEAST 1 MONTH IN ADVANCE.
DEVELOPERS SHALL ALSO COMPLY WITH
ANY NOTIFICATION REQUIREMENTS OF OTHER
UTILITY PROVIDERS (ESB, GAS MAIN,
TELECOMMUNICATION ETC.) PROPOSED, OR IN CLOSE PROXIMITY TO ANY EXISTING STRUCTURES OR FEATURES THAT WILL INHIBIT ACCESS FOR POST INSTALLATION MAINTENANCE AND ACCESS. ANY DAMAGE SHALL BE NOTIFIED IMMEDIATELY TO IRISH WATER. THE PERSON WHO CAUSES THE DAMAGE TO A WATER MAIN OR FITTING WILL BE DEEMED TO HAVE COMMITTED AN OFFENCE UNDER SECTION 45 OF THE WATER SERVICES ACT 2007.

WATERMAINS OF ANY SIZE SHALL NOT BE WITHIN 1m OF THE BOUNDARY TO A PREMISES. 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. DETAIL 04 - SLUICE VALVE FOR POLYETHYLENE (P.E.) PIPE (<350r ALL DIMENSIONS ARE IN MILLIMETRES (mm)
UNLESS NOTED OTHERWISE. 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. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER DRAWING 01. ALL SLUICE VALVES SHALL BE ANTI-CLOCKWISE CLOSING. 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. VE CHAMBER TO BE CONSTRUCTED OF CAST CONCRETE UNITS OR HIGH ISITY BLOCKWORK. ALTERNATIVELY PREFABRICATED CHAMBER TO MAY ALSO BE USED, SUBJECT TO YEARY ALL BE DESIGNED TO CARRY ALL LIVE DS & DEAD LOADS, & CONSIST OF A UFORCED CONCRETE SLAB OF IN-SITU ICRETE, GRADE C30/37, WITH A MINIMUM XNNESS OF 150mm. ALTERNATIVELY, —CAST CONCRETE ROOFS MAY BE USED, USECT TO IRISH WATER REVIEW, & IPLIANCE WITH BS 5911, PART 4. AND ACCESS. nm ø) 10. 12. $\stackrel{\rightharpoonup}{:}$ 4. 13. 10. WHERE THE DESIGN DEVIATES FROM THIS STANDARD DETAIL, THE DESIGN SHALL BE SUBJECT TO THE REVIEW OF IRISH WATER.

SEPARATION DISTANCES BETWEEN UTILITIES MAY BE INCREASED TO PROVIDE FOR CHAMBER & THRUST BLOCKS AT BENDS. 2. 450x450mm INTERNAL DIMENSION
CHAMBERS MAY BE PROVIDED SUBJECT TO
REVIEW BY IRISH WATER. SUCH CHAMBERS
SHALL BE PROVIDED WITH GRADE 'A' HEAVY
DUTY COVER & FRAME & STAMPED 'SV'. S. 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. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH AROUND COVERS IN GREEN AREAS. ANY SPECIAL ROAD REINSTATEMENT AROUND COVER AND FRAME SHALL BE TO ROAD AUTHORITY'S REQUIREMENTS. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206. THRUST BLOCKS (NOT SHOWN ON DRAWING)
TO BE PROVIDED AS PER STANDARD
DRAWING 06 AT ALL TEES. BENDS, TAPERS,
DEAD ENDS AND PIPES AT STEEP SLOPES. ANTI-CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES. EW ROAD CONSTRUCTION & SURFACE NISH TO BE TO ROAD AUTHORITY EQUIREMENTS. DETAIL 05
(40 - 250)
NOTES:
1. ALL DIM
UNLESS
2. STRUCTU
DETAIL T.
AND SUB
REVIEW F
TO CARR)
& CONCRETE
TO IRISH W
WITH BS 50
CONCRETE
TO IRISH W
WITH BS 50
CONCRETE
BE C30/37, V
SEALING GAS
WITH THE RE
BS 5911-PA
CONCRETE SI
ACCORDANCE METER CHAM APPROVED H IS EN124 RA SHALL BE SU CONDITIONS : IRISH WATER. 200mm ALL CONCRETE F GRASS ARE/ ANTI-CORRO AROUND BUF

2.) DO NOT SCALE. USE FIGURED DIMENSIONS ONLY

TO BE READ IN CONJUNCTION HIGGINS ENGINEERING DRAWING

NOTES

vil 05 - NON-MECH. METER CHAMBER 8 - 250mm ø)	DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN545. PE PIPES AND	
	FITTINGS TO BE IN ACCORDANCE WITH IS EN	
LL DIMENSIONS ARE IN MILLIMETRES (mm)	12201: 2011.	
NLESS NOTED OTHERWISE. 9	ALL CHAMBERS TO BE CHECKED FOR UPLIFT	
TRUCTURAL DESIGN AND REINFORCEMENT	BY THE DEVELOPER BASED ON GROUND	
ETAIL TO BE PROVIDED BY THE DEVELOPER ND SUBMITTED TO IRISH WATER FOR	CONDITIONS WITHIN THE SITE, SHOULD ANTI-FLOATATION MEASURES BE REQUIRED	
EVIEW. ROOF SLABS SHALL BE DESIGNED	THEY SHALL BE SUBJECT TO REVIEW BY	
D CARRY ALL LIVE LOADS & DEAD LOADS, CONSIST OF A REINFORCED CONCRETE	RISH WATER.	
AB OF IN-SITU CONCRETE, GRADE 10.		
30/37, WITH A MINIMUM THICKNESS OF	THE FLOW METER, STRAIGHT PIPE LENGTHS	
ONCRETE ROOFS MAY BE USED, SUBJECT	UPSTREAM AND DOWNSTREAM OF THE METER	
OIRISH WATER REVIEW, & COMPLIANCE ITH BS 5911, PART 4.	CAPABLE OF ACCURATE NIGHT FLOW	
ONCRETE FOR FLOW METER CHAMBER TO	MICOCOLUMENTO.C.	
© C30/37.	. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.	
RECAST UNITS COMPLETED WITH RUBBER 12. EALING GASKET BETWEEN UNITS, COMPLYING 12. THE RECHIPPEMENTS OF IS EN 1017 AND 11. THE	2. ANY SPECIAL ROAD REINSTATEMENT AROUND COVER & FRAME SHALL BE TO ROAD	
S 5911—PART 3, COMPLETE WITH 150mm	AUTHORITY'S REQUIREMENTS.	
DZDAT T KIRROLZO MAY RT ISTO AS AZ	_	

NON-MECH. METER CHAMBER	œ	DUCTILE IRON PIPES AND FITTINGS TO BE IN	
		ACCORDANCE WITH IS EN545, PE PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN	
SIONS ARE IN MILLIMETRES (mm) TED OTHERWISE.)	12201:2011.	
L DESIGN AND REINFORCEMENT BE PROVIDED BY THE DEVELOPER TTED TO IRISH WATER FOR OF SLABS SHALL BE DESIGNED ALL LIVE LOADS & DEAD LOADS,	;c	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.	
OF A KEINFORCED CONCRETE I—SITU CONCRETE, GRADE TH A MINIMUM THICKNESS OF TERNATIVELY, PRE—CAST	10.	PIPEWORK TO BE DOWNSIZED TO ACCOMMODATE THE REQUIRED RANGE OF THE FLOW METER. STRAIGHT PIPE LENGTHS	
ROOFS MAY BE USED, SUBJECT ATER REVIEW, & COMPLIANCE 911, PART 4.		UPSTREAM AND DOWNSTREAM OF THE METER TO BE PROVIDED. THE METER SHALL BE CAPABLE OF ACCURATE NIGHT FLOW MEASUREMENTS.	
FOR FLOW METER CHAMBER TO	≓.	ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.	
NITS COMPLETED WITH RUBBER ISKET BETWEEN UNITS, COMPLYING REQUIREMENTS OF IS EN 1917 AND ART 3, COMPLETE WITH 150mm	12.	ANY SPECIAL ROAD REINSTATEMENT AROUND COVER & FRAME SHALL BE TO ROAD AUTHORITY'S REQUIREMENTS.	
SURROUND MAY BE USED AS AN E ALTERNATIVE. CONCRETE TO BE GRADE C16/20 IN SE WITH IS EN 206.	13.	NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS.	
MBER SHALL BE COVERED WITH HEAVY DUTY METAL COVERS TO ATING D400. COVER AND FRAME SUITABLE FOR ROAD AND TRAFFIC AND IS SUBJECT TO REVIEW BY R.	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.	
ROUND, 100mm DEEP PLINTH AROUND COVERS IN AS.			
OSION TAPE TO BE PROVIDED JRIED FLANGES.			

CAD DR.		SCALE		DRAWING	PROJECT No.	SH	1	R	DRAWING NAME	PROPOSE AT KILHI	CLIENT TUA	PL	ISSUED	REV	Р	
DRAWN BY	<u></u>			No.	. No.	SHEET		N T	NAME	ONAME POSED	TUATH HOUSING	PLANNING		DATE	25.05.21	
	1:200					4	R	\(\)		31 HC)GE L/	USINC					
CHECKED							WATERMAIN	IRISH WATER		ROJECT NAME PROPOSED 31 HOUSING UN AT KILHEDGE LANE, LUSK	j	ИV		DES	ISSUED	
ВҮ		DRAW		REVISION	18D062	4		JU		ROJECT NAME PROPOSED 31 HOUSING UNITS AT KILHEDGE LANE, LUSK				DESCRIPTION	FOR PLANNING	
	19	DRAWN DATE		NOI	Ň		DETAILS			S					NING	
APPROVED	19.05.2021		7				S									
D BY	021													DWG BY	DW	
														APPR. BY	LM	

The Glass House, 11 Coke Lane ithfield, Dublin 7. Tel: 01 6612321 E-mail: admin@hayeshiggins.ie

Gas House Lane, Kilkenny, Tel: (056) 7764710

HAYES HIGGINS

 \leq

무

PARTNERSHIP