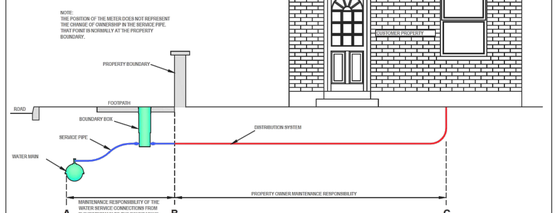
1. ALL DIMENSIONS IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.



	MAINTENANCE RESPONSIBILITY
A - B SERVICE PIPE	SEE NOTE ABOVE
METER / BOUNDARY BOX	IRISH WATER
B - C (DISTRIBUTION SYSTEM)	PROPERTY OWNER
INTERNAL PLUMBING	PROPERTY OWNER

REFER TO INDEX SHEET FOR NOTES REGARDING DESIGN RESPONSIBILITY & RISK ASSESSMENT

UISCE ÉIREANN / IRISH WATER

No	Date	Des	Chk	Description	App
1	07/20/PH	TOC		Reponsibility Changed	WD
0	99/15/	MJC	TOC	Initial Issue	SL

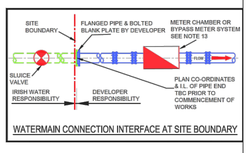
STANDARD DETAILS - WATER

TITLE: WATER SERVICE CONNECTION RESPONSIBILITY

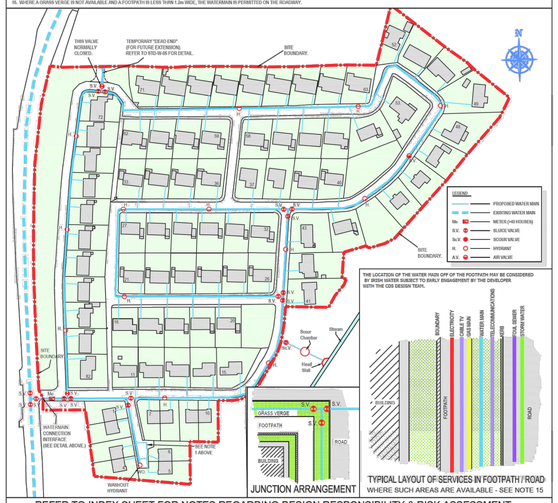
SCALE: NOT TO SCALE | DATE: SEPT. 2015

DRAWING No.: STD-W- 01 | REV: 1

1. WATER MAIN LAYOUTS SHALL BE ARRANGED IN LOOPS OR RINGS SO AS TO AVOID "DEAD ENDS" OR TERMINAL POINTS. ALL MAINS SHALL TERMINATE IN A LOOP OR RING TO ACCOMMODATE ONE-DIRECTIONAL FLUSHING OF THE NETWORK. LOOPS SHALL HAVE A MINIMUM OF 4 HOUSES AND 1 HYDRANT.
2. THE MINIMUM PIPE SIZE SHALL BE 100mm INTERNAL DIAMETER IN HOUSING DEVELOPMENTS OF 40 AND UP TO 199 HOUSES. DEVELOPMENTS OF 199 HOUSES AND ABOVE SHALL HAVE A MINIMUM PIPE SIZE OF 150mm INTERNAL DIAMETER. 90MM AND 100mm BRANCH MAINS, NOMINAL INTERNAL DIAMETER OF 90mm AND 100mm RESPECTIVELY, MAY BE ALLOWED IN INFILLER DEVELOPMENTS BUT NOT WHERE HYDRANTS ARE LOCATED AND NOT MORE THAN 20 HOUSES SHALL BE SERVED FROM ANY ONE BRANCH.
3. THE MINIMUM PIPE SIZE SHALL BE 150mm IN INDUSTRIAL OR COMMERCIAL DEVELOPMENTS.
4. EXCEPT PREMISE SHOULD HAVE A SEPARATE SERVICE CONNECTION, THE USE OF COMMON SERVICE PIPES IS NOT ALLOWED. SERVICE CONNECTIONS SHALL BE AS SHORT AS REASONABLY POSSIBLE. LONG SERVICE CONNECTIONS (IN EXCESS OF 10m) SHALL NOT BE ALLOWED. A GIDEX MAIN AT THE OPPOSITE SIDE OF THE ROAD TO THE MAIN WATER MAIN MAY BE REQUIRED SUBJECT TO APPROVAL FROM IRISH WATER. SERVICE CONNECTIONS SHALL BE A MINIMUM PIPE SIZE OF 25mm OUTSIDE DIAMETER, 20mm INTERNAL DIAMETER.
5. WATER MAINS INVOLVING LAID TO PRIVATE NETWORKS SHALL BE DESIGNED TO LOCAL WATER NETWORK. WATER MAINS MAY TERMINATE IN A DEAD END ONLY WITH IRISH WATER APPROVAL, IN WHICH CASE AN ON-LINE WANSCUT HYDRANT SHALL BE PROVIDED AT THE DEAD END, OR AS OTHERWISE AGREED.
6. VALVES SHALL BE ARRANGED IN SUCH A MANNER TO ALLOW THE NETWORK TO BE MANAGED TO ENSURE THAT NO MORE THAN 40 PROPERTIES LOSE WATER FROM A BURST ON THE SYSTEM, AT ANY ONE TIME.
7. NO DOMESTIC PROPERTY SHALL BE MORE THAN 6m FROM A HYDRANT. HYDRANT DETAILS AND LOCATIONS SHALL BE SUBJECT TO THE APPROVAL OF THE RELEVANT LOCAL AUTHORITY FIRE DEPARTMENT.
8. WATER SUPPLY MAINS SHALL NOT BE LAID IN CULVERTS AND SHALL NOT THROUGH INDIVIDUAL PRIVATE GARDENS OR DRIVEWAYS ETC.
9. A THREE WAY VALVE ARRANGEMENT SHALL BE PROVIDED AT ALL JUNCTIONS, AS A MINIMUM.
10. IN THE CASE OF A SINGLE ENTRANCE DEVELOPMENT, THE MAIN SHALL BE LOCATED AT THE RIGHT HAND SIDE OF THE ENTRANCE TO THE NEW DEVELOPMENT (FACING A NEW ESTATE) INTO THE DEVELOPMENT. IF POSSIBLE AND SINCE THE PROPERTIES ARE EQUALLY AND REASONABLY DISTRIBUTED AT BOTH SIDES OF THE ESTATE ROADWAY.
11. AIR VALVES TO BE LOCATED AT POINTS WHERE AIR IS LIKELY TO BUILD UP.
12. THE DEVELOPER IS TO LIAISE WITH THE FIRE SERVICES AUTHORITY IN ORDER TO ENSURE FIRE FLOWS ARE AVAILABLE THROUGHOUT THE DEVELOPMENT.
13. WALK FLOW METERS SHALL BE FITTED IN ALL DEVELOPMENTS WITH A DEMAND IN EXCESS OF 2M³/ PER DAY. BULK FLOW METERS SHALL BE FITTED IN ALL DEVELOPMENTS WITH A DEMAND IN EXCESS OF 10M³/ PER DAY. WHERE A DEVELOPMENT IS SUPPLIED FROM MORE THAN ONE SOURCE, EACH SOURCE SHALL BE PROVIDED WITH A DEDICATED BYPASS PIPEWORK AND CHAMBER IN ACCORDANCE WITH IRISH WATER STANDARD DETAILS TO ACCOMMODATE THE RECORDING OF INVERT FLOWS.
14. WATERMAINS TO BE LOCATED IN GRASS VERGE, IF GRASS VERGE IS NOT AVAILABLE, WATERMAINS TO BE LOCATED UNDER FOOTPATH AWAY FROM KERB. REFER TO STD-W-01 FOR TYPICAL UTILITY LAYOUT.
15. WHERE A GRASS VERGE IS NOT AVAILABLE AND A FOOTPATH IS LESS THAN 1.2m WIDE, THE WATERMAIN IS PERMITTED ON THE ROADWAY.



WATERMAIN CONNECTION INTERFACE AT SITE BOUNDARY



REFER TO INDEX SHEET FOR NOTES REGARDING DESIGN RESPONSIBILITY & RISK ASSESSMENT

UISCE ÉIREANN / IRISH WATER

No	Date	Des	Chk	Description	App
2	07/20/PH	TOC		Connection fr/interface Detail added, notes added	WD
1	11/11/	MJC	TOC	Text "lead-in" & note 1 ref added	WD
0	99/15/	MJC	TOC	Initial Issue	SL

STANDARD DETAILS - WATER

TITLE: TYPICAL LAYOUT FOR WATER MAINS WITHIN DEVELOPMENTS

SCALE: NOT TO SCALE | DATE: SEPT. 2015

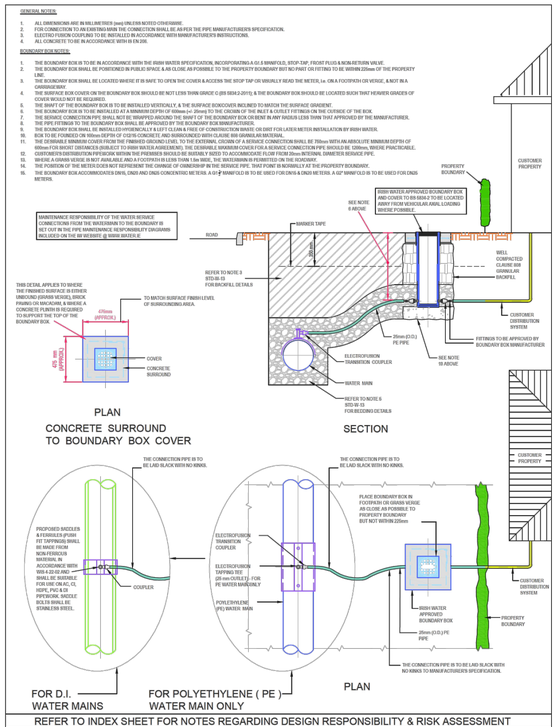
DRAWING No.: STD-W- 02 | REV: 2

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. FOR CONNECTION TO AN EXISTING MAIN THE CONNECTION SHALL BE AFTER THE PIPE MANUFACTURERS SPECIFICATION.
3. ELECTRO FUSION COUPLERS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
4. ALL CONCRETE TO BE IN ACCORDANCE WITH BS EN 206.

BOUNDARY BOX NOTES:

1. THE BOUNDARY BOX IS TO BE IN ACCORDANCE WITH THE IRISH WATER SPECIFICATION, INCORPORATING A GI.5 MINIFOLD, STOP TAP, 3 FOOT PLUG & A NON RETURN VALVE.
2. 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.
3. 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.
4. THE SURFACE BOX COVER ON THE BOUNDARY BOX SHOULD BE NOT LESS THAN GRADE C (BS 5834-2:2011). & THE BOUNDARY BOX SHOULD BE LOCATED SUCH THAT HEAVIER GRADES OF COVER WOULD NOT BE REQUIRED.
5. THE SHAFT OF THE BOUNDARY BOX IS TO BE INSTALLED VERTICALLY & THE SURFACE BOX/COVER INCLINED TO MATCH THE SURFACE GRADIENT.
6. THE BOUNDARY BOX SHALL BE LOCATED AT A MINIMUM DEPTH OF 500mm (or 200mm) TO THE CROWN OF THE INLET & OUTLET FITTINGS ON THE OUTSIDE OF THE BOX.
7. THE SERVICE CONNECTION PIPE SHALL NOT BE INSERTED MORE THAN 50mm INTO THE SHAFT OF THE BOUNDARY BOX OR BEND IN ANY ANGLE LESS THAN THAT APPROVED BY THE MANUFACTURER.
8. THE PIPE FITTINGS TO THE BOUNDARY BOX SHALL BE APPROVED BY THE BOUNDARY BOX MANUFACTURER.
9. THE BOUNDARY BOX SHALL BE INSTALLED WITH ITS LID FLUSH & FREE OF CONSTRUCTION WASTE OR DIRT FOR LATER METER INSTALLATION BY IRISH WATER.
10. BOX TO BE FOUNDED ON 100mm DEPTH OF C12/15 CONCRETE, AND SURROUNDED WITH CLAUSE 808 GRANULAR MATERIAL.
11. THE DEFINABLE MINIMUM COVER FROM THE FINISHED GROUND LEVEL TO THE EXTERNAL CROWN OF A SERVICE CONNECTION PIPE SHALL BE 750mm WITH AN ABSOLUTE MINIMUM DEPTH OF 600mm FOR SHORT DISTANCES (SUBJECT TO IRISH WATER ASSESSMENT). THE DESIRABLE MINIMUM COVER FOR A SERVICE CONNECTION PIPE SHOULD BE 1200mm, WHERE PRACTICABLE.
12. THE SERVICE CONNECTION PIPE SHALL BE LAID AT A MINIMUM GRADIENT OF 1:40 AND SHALL BE LAID IN A STRAIGHT LINE FROM CONNECTION TO THE BOUNDARY BOX WHERE PRACTICABLE.
13. WHERE A GRASS VERGE IS NOT AVAILABLE AND A FOOTPATH IS LESS THAN 1.5m WIDE, THE WATERMAIN IS PERMITTED ON THE ROADWAY.
14. THE POSITION OF THE METER DOES NOT REPRESENT THE CHANGE OF OWNERSHIP IN THE SERVICE PIPE. THAT POINT IN NORMALLY AT THE PROPERTY BOUNDARY.
15. THE BOUNDARY BOX ACCOMMODATION DN15, DN20 AND DN25 CONCENTRIC METERS. A GI.5 MINIFOLD IS TO BE USED FOR DN15 & DN20 METERS. A GI.10 MANIFOLD IS TO BE USED FOR DN25 METERS.



REFER TO INDEX SHEET FOR NOTES REGARDING DESIGN RESPONSIBILITY & RISK ASSESSMENT

UISCE ÉIREANN / IRISH WATER

No	Date	Des	Chk	Description	App
4	07/20/PH	TOC		Service connection ownership revised, notes added	WD
3	11/11/	MJC	TOC	Updated & added notes	WD
2	99/16/	MJC	TOC	Revised D.I. service tapping detail	WD
1	04/16/	MJC	TOC	Added dimensions & notes	WD
0	99/15/	MJC	TOC	Initial Issue	SL

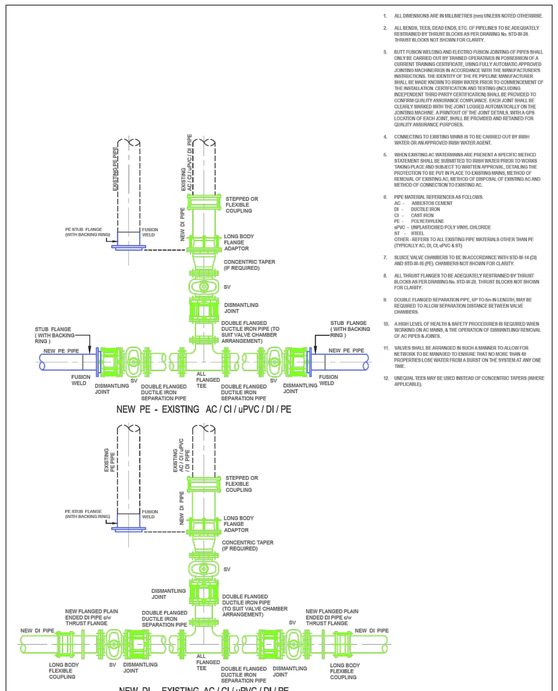
STANDARD DETAILS - WATER

TITLE: CUSTOMER CONNECTION AND BOUNDARY BOX (25mm OD PIPE)

SCALE: NOT TO SCALE | DATE: SEPT. 2015

DRAWING No.: STD-W- 03 | REV: 4

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. ALL BENDS, TEES, DEAD ENDS, ETC. OF PIPELINES TO BE ADEQUATELY RESTRAINED BY THRUST BLOCKS AS PER DRAWING No. STD-W-08. THRUST BLOCKS NOT SHOWN FOR CLARITY.
3. BUTT FUSION WELDING AND ELECTRO FUSION JOINTING OF PIPES SHALL ONLY BE CARRIED OUT BY TRAINED OPERATIVES IN POSSESSION OF A CURRENT TRAINING CERTIFICATE, USING FULLY AUTOMATIC APPROVED EQUIPMENT AND IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. THE IDENTITY OF THE PE PIPELINE MANUFACTURER SHALL BE MADE KNOWN TO IRISH WATER PRIOR TO COMMENCEMENT OF THE INSTALLATION. CERTIFICATION AND TESTING (INCLUDING INDEPENDENT THIRD PARTY CERTIFICATION) SHALL BE PROVIDED TO CONFIRM QUALITY ASSURANCE COMPLIANCE. EACH JOINT SHALL BE CLEARLY BRANDED WITH THE JOINT LOGGED AUTOMATICALLY BY THE JOINING MACHINE. A PRINTOUT OF THE JOINT DETAILS, WITH A GPS LOCATION OF EACH JOINT, SHALL BE PROVIDED AND RETAINED FOR QUALITY ASSURANCE PURPOSES.
4. CONNECTING TO EXISTING MAINS IS TO BE CARRIED OUT BY IRISH WATER OR AN APPROVED IRISH WATER AGENT.
5. WHEN EXISTING AC WATERMAINS ARE PRESENT A SPECIFIC METHOD STATEMENT SHALL BE SUBMITTED TO IRISH WATER PRIOR TO WORKS TAKING PLACE AND SUBJECT TO WRITTEN APPROVAL, DETAILING THE PROTECTION TO BE PUT IN PLACE TO EXISTING MAINS, METHOD OF REMOVAL OF EXISTING AC, METHOD OF DISPOSAL OF EXISTING AC AND METHOD OF CONNECTION TO EXISTING AC.
6. PIPE MATERIAL REFERENCES AS FOLLOWS:
   AC - ASBESTOS CEMENT
   DI - DUCTILE IRON
   CI - CAST IRON
   PE - POLYETHYLENE
   uPVC - UNPLASTICISED POLY VINYL CHLORIDE
   ST - STEEL
   OTHER - REFERS TO ALL EXISTING PIPE MATERIALS OTHER THAN PE (TYPICALLY AC, DI, CI, uPVC & ST)
7. BLUE VALVE CHAMBERS TO BE IN ACCORDANCE WITH ST/D-W-14 (DI) AND ST/D-W-16 (PE), CHAMBERS NOT SHOWN FOR CLARITY.
8. ALL THRUST FLANGES TO BE ADEQUATELY RESTRAINED BY THRUST BLOCKS AS PER DRAWING No. ST/D-W-08. THRUST BLOCKS NOT SHOWN FOR CLARITY.
9. DOUBLE FLANGED SEPARATION PIPE, UP TO 6m IN LENGTH, MAY BE REQUIRED TO ALLOW SEPARATION DISTANCE BETWEEN VALVE CHAMBERS.
10. A HIGH LEVEL OF HEALTH & SAFETY PROCEDURES IS REQUIRED WHEN WORKING ON AC MAINS, & THE OPERATION OF DISMANTLING REMOVAL OF AC PIPES & JOINTS.
11. VALVES SHALL BE ARRANGED IN SUCH A MANNER TO ALLOW FOR NETWORK TO BE MANAGED TO ENSURE THAT NO MORE THAN 40 PROPERTIES LOSE WATER FROM A BURST ON THE SYSTEM AT ANY ONE TIME.
12. UNEQUAL TEES MAY BE USED INSTEAD OF CONCENTRIC TAPERS (WHERE APPLICABLE).



REFER TO INDEX SHEET FOR NOTES REGARDING DESIGN RESPONSIBILITY & RISK ASSESSMENT

UISCE ÉIREANN / IRISH WATER

No	Date	Des	Chk	Description	App
3	07/20/PH	TOC		Added Note to 12 separation pipe added, dismantling joints retained	WD
2	11/11/	MJC	TOC	Added Note 11	WD
1	99/16/	MJC	TOC	Added Note 10	WD
0	99/15/	MJC	TOC	Initial Issue	SL

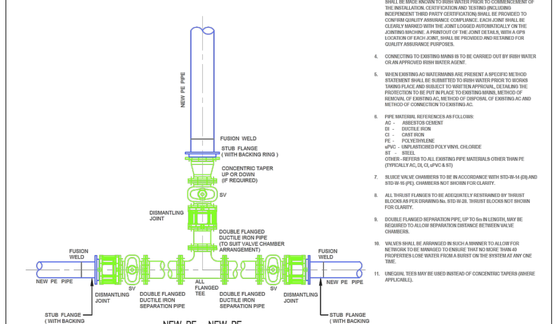
STANDARD DETAILS - WATER

TITLE: GENERAL PIPE CONNECTIONS (Sheet 3 of 7)

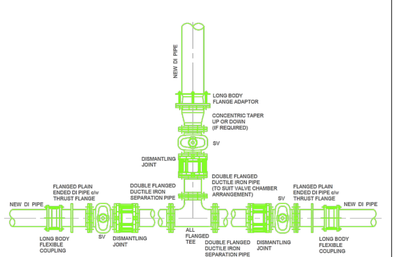
SCALE: NOT TO SCALE | DATE: SEPT. 2015

DRAWING No.: STD-W- 06 | REV: 3

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



NEW PE - NEW PE



NEW DI - NEW DI

REFER TO INDEX SHEET FOR NOTES REGARDING DESIGN RESPONSIBILITY & RISK ASSESSMENT

UISCE ÉIREANN / IRISH WATER

No	Date	Des	Chk	Description	App
2	07/20/PH	TOC		Added Sv.F. operation (no valve) added, dismantling joints retained	WD
1	11/11/	MJC	TOC	Notes added & updated	WD
0	99/15/	MJC	TOC	Initial Issue	SL

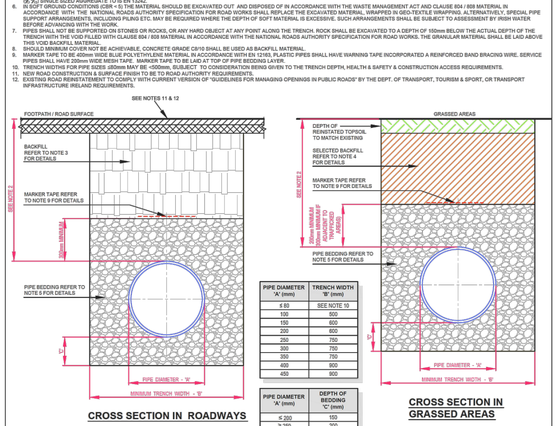
STANDARD DETAILS - WATER

TITLE: GENERAL PIPE CONNECTIONS (Sheet 4 of 7)

SCALE: NOT TO SCALE | DATE: SEPT. 2015

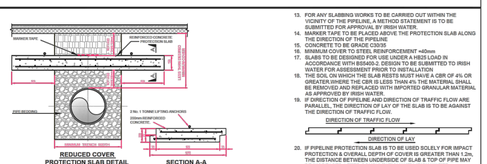
DRAWING No.: STD-W- 07 | REV: 2

1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
2. 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 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.
3. CLAUSE 804 / 808 MATERIAL IS 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 804 / 808 SHALL CONTAIN WITHIN 600mm 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 LOCATED, PROVIDES **WRITTEN APPROVAL** TO THE DEVELOPER TO THE USE SUCH ALTERNATIVE MATERIAL.
4. SELECTED EXCAVATED MATERIAL MAY BE USED IN GREEN-FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO REVIEW BY IRISH WATER.
5. PIPE BEDDING SHALL COMPLY WITH WIS 4-08-02 AND IGN 4-08-01 GRANULAR MATERIAL SHALL BE 14mm TO 5mm (⅝,⅜) GRADED AGGREGATE OR 10mm (⅜,⅛) SINGLE SIZED AGGREGATE TO BS EN 13242.
6. IN SOFT GROUND CONDITIONS (CBR < 5) THE MATERIAL SHOULD BE EXCAVATED OUT AND DISPOSED OF IN ACCORDANCE WITH THE WASTE MANAGEMENT ACT AND CLAUSE 604 / 605 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS SHALL REPLACE THE EXCAVATED MATERIAL, WRAPPED IN GEO-TEXTILE SWRAPPING. 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.
7. 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.
8. SHOULD MINIMUM COVER NOT BE ACHIEVABLE, CONCRETE GRADE C8/10 SHALL BE USED AS BACKFILL MATERIAL.
9. PIPES SHALL BE LAID AT A MINIMUM GRADIENT OF 1:40 AND SHALL BE LAID IN A STRAIGHT LINE FROM CONNECTION TO 12165, PLASTIC PIPES SHALL HAVE WARNING TAPE INCORPORATED A REINFORCED BAND BRACING WIRE. SERVICE CONNECTIONS SHALL BE LAID AT RIGHT ANGLES TO THE ALIGNMENT OF THE WELDING LAYER.
10. PIPES SHALL HAVE 300mm WIDE MESH TAPE, SUITABLE FOR USE IN CONTACT WITH POTABLE WATER, LAID AT TOP OF PIPE BEDDING LAYER.
11. TRENCH WIDTHS FOR PIPE SIZES ≤600mm MAY BE <500mm, SUBJECT TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY & CONSTRUCTION ACCESS REQUIREMENTS.
12. NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY REQUIREMENTS.
13. 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.



PIPE DIAMETER 'A' (mm)	TRENCH WIDTH 'B' (mm)
≤ 80	SEE NOTE 10
100	500
150	600
200	600
250	750
300	750
350	750
400	900
450	900

PIPE DIAMETER 'A' (mm)	DEPTH OF BEDDING 'C' (mm)
≤ 200	150
≥ 250	200



13. FOR ANY SLABBING WORKS TO BE CARRIED OUT WITHIN THE VICINITY OF THE PIPELINE, A METHOD STATEMENT IS TO BE SUBMITTED FOR APPROVAL BY IRISH WATER.
14. MARKER TAPE TO BE PLACED ABOVE THE PROTECTION SLAB ALONG THE ENTIRE LENGTH OF THE PIPELINE.
15. CONCRETE TO BE GRADE C30/37.
16. MINIMUM COVER TO STEEL REINFORCEMENT =40mm
17. SLABS TO BE DESIGNED FOR USE UNDER A HB25 LOAD IN ACCORDANCE WITH BS5400-2. DESIGN TO BE SUBMITTED TO IRISH WATER FOR ASSESSMENT PRIOR TO INSTALLATION
18. THE SOIL ON WHICH THE SLAB RESTS MUST HAVE A CBR OF 4% OR GREATER. WHERE THE CBR IS LESS THAN 4% THE MATERIAL SHALL BE REMOVED AND REPLACED WITH IMPORTED GRANULAR MATERIAL AS APPROVED BY IRISH WATER.
19. IF DIRECTION OF PIPELINE AND DIRECTION OF TRAFFIC FLOW ARE PARALLEL, THE DIRECTION OF LAY OF THE SLAB IS TO BE AGAINST THE DIRECTION OF TRAFFIC FLOW.

20. IF PIPELINE PROTECTION SLAB IS TO BE USED SOLELY FOR IMPACT PROTECTION & OVERALL DEPTH OF COVER IS GREATER THAN 1.2m, THE DISTANCE BETWEEN UNDERSIDE OF SLAB & TOP OF PIPE MAY BE INCREASED AFTER CONSULTATION WITH IRISH WATER.

REFER TO INDEX SHEET FOR NOTES REGARDING DESIGN RESPONSIBILITY & RISK ASSESSMENT

UISCE ÉIREANN / IRISH WATER

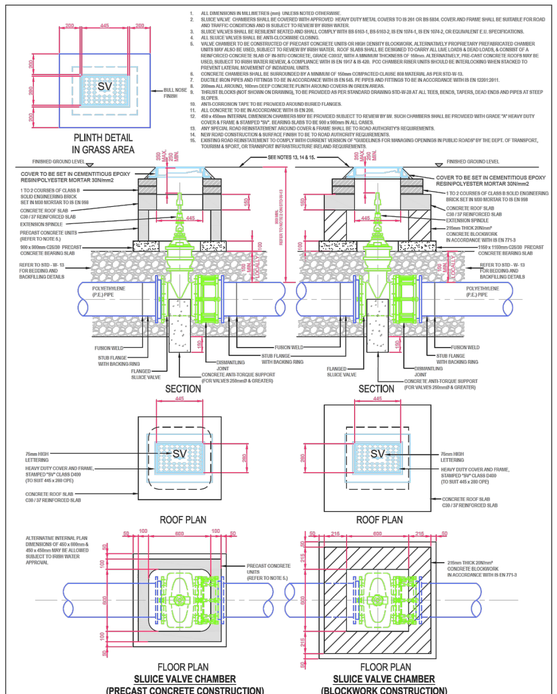
No	Date	Des	Chk	Description	App
2	07/20/PH	TOC		Minor edit to note 3 Protection slab detail added. Title amended	WD
1	11/11/	MJC	TOC	Added & updated notes	WD
0	99/15/	MJC	TOC	Initial Issue	SL

STANDARD DETAILS - WATER

TITLE: TRENCH BACKFILL / BEDDING & REDUCED COVER PROTECTION SLAB DETAIL

SCALE: NOT TO SCALE | DATE: SEPT. 2015

DRAWING No.: STD-W- 13 | REV: 2


SV
BACK NOTE 7 FW999
PLINTH DETAIL IN GRASS AREA
FINISHED GROUND LEVEL
SEE NOTES 13, 14 & 15
COVER TO BE SET IN CEMENTITIOUS EPOXY RESIN/POLYESTER MORTAR 325N/mm2
1 TO 3 COURSES OF CLASS B SOLID ENGINEERING BRICK SET IN 1:3 CEMENT MORTAR TO BS EN 998
CONCRETE ROOF SLAB C30 / 37 REINFORCED SLAB
EXTENSION SPINDLE
PRECAST CONCRETE UNITS (REFER TO NOTE 6.)
990 x 990mm C30/37 PRECAST CONCRETE BEARING SLAB
REFER TO STD - W - 10 FOR BEDDING AND BACKFILLING DETAILS
POLYETHYLENE (P.E.) PIPE
FUSION WELD
STUB FLANGE WITH BACKING RING
FLANGED BLUCE VALVE
DISMANTLING JOINT
CONCRETE ANTI-TORQUE SUPPORT (FOR VALVES ≥ 200mm Ø & GREATER)
SECTION
75mm HIGH LETTERING
HEAVY DUTY COV