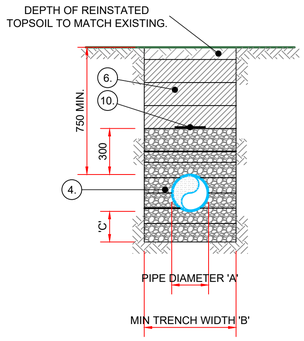


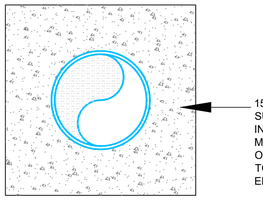
PIPE SIZE 'A' (mm)	WIDTH OF TRENCH 'B' (mm)
< 80	SEE NOTE 11.
100	500
150	600
200	600
250	750
300	750
350	750
400	900
450	900

PIPE SIZE 'A' (mm)	DEPTH OF BEDDING 'C' (mm)
< 200	150
> 500	200

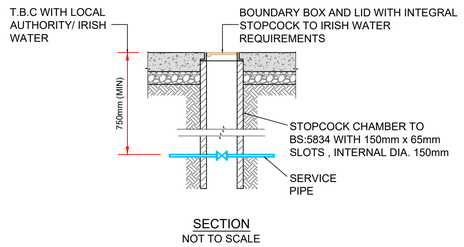
UNDER ROADS / HARDSTANDINGS / FOOTPATHS
SCALE 1:20



UNDER LANDSCAPED AREAS
SCALE 1:20

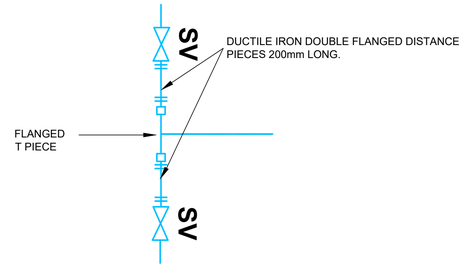


CONCRETE ENCASEMENT DETAIL WHERE MIN. COVER NOT PROVIDED
SCALE 1:10
PROVIDED WHERE COVER TO PIPES: < 1.2m IN ROADS
OR PIPES UNDER BUILDINGS: <0.9m IN GARDENS/GRASSED AREAS



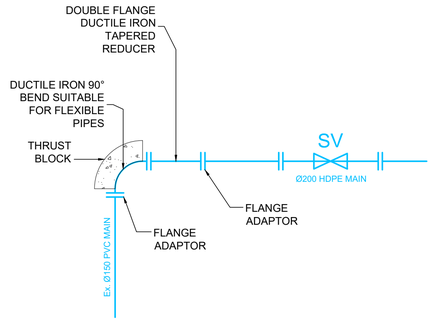
SECTION
NOT TO SCALE

BOUNDARY BOX

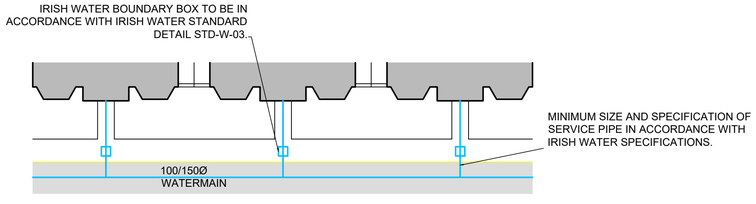


SCHEMATIC OF PROPOSED MAIN CONNECTION TO EXISTING WATERMAIN

N.T.S.



SCHEMATIC OF EX. PVC MAIN CONNECTION TO NEW HDPE MAIN
N.T.S.



TYPICAL WATER CONNECTION TO INDIVIDUAL UNITS
SCALE 1:200

NOTE:
CONTRACTOR TO NOTE ALL WATERMAIN WORKS TO BE IN ACCORDANCE WITH IRISH WATER STANDARD DETAILS AND CODE OF PRACTICE. IRISH WATER DETAILS AND REQUIREMENTS WILL TAKE PRECEDENCE

NOTES
GENERAL:
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING

2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE

3. ENGINEER TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES

4. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH
RELEVANT DRAWINGS AND SPECIFICATIONS.

5. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY
DATUM AT MALIN HEAD

1. THIS DRAWING TO BE READ IN CONJUNCTION WITH RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS.
2. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING. ALL DIMENSIONS TO BE CHECKED ON SITE. ENGINEER TO BE INFORMED IMMEDIATELY OF ANY DISCREPANCIES BEFORE WORK PROCEEDS.
3. 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 A HIGHER CLASS OF BEDDING MATERIAL MAY BE REQUIRED WHERE HIGH TRAFFIC LOADINGS IS ANTICIPATED. THE DESIRABLE COVER FOR A WATERMAIN SHOULD BE 1200mm, WHERE PRACTICABLE & SHOULD NOT EXCEED 3.0m.
4. PIPE BEDDING SHALL COMPLY WITH WIS 4-08-02 AND IGN 4-08-01 GRANULAR MATERIAL SHALL BE 14mm TO 5mm GRADED OR 10mm SINGLE SIZED AGGREGATE TO IS EN 13242.

BACKFILL

5. CLAUSE 804/808 MATERIAL IN ACCORDANCE WITH THE NATIONAL ROADS AUTHORITY SPECIFICATION FROM ROAD WORKS IS TO BE USED AS BACKFILL MATERIAL WHERE THE MATER MAIN IS LOCATED IN ROADS, FOOTPATHS OR WHEN THE NEAREST PART OF THE TRENCH IS WITHIN 1.0m 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 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.
6. SELECTED EXCAVATED MATERIAL MAY BE USED IN GREEN FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO THE APPROVAL OF IRISH WATER.
7. 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 ROAD 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.
8. 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.
9. SHOULD MINIMUM COVER NOT BE ACHIEVABLE, CONCRETE GRADE C8/10 SHALL BE USED AS BACKFILL MATERIAL.

WARNING MESH

10. MARKER TAPE TO BE 400mm WIDE BLUE POLYETHYLENE MATERIAL IN ACCORDANCE WITH EN 12163, PLASTIC PIPES SHALL HAVE WARNING TAPE INCORPORATED A REINFORCED BAND BRACING WIRE. SERVICE PIPES SHALL HAVE 200mm WIDE MESH TAPE. MARKER TAPE TO BE LAID AT TOP OF PIPE BEDDING LAYER.
11. TRENCH WIDTHS FOR PIPE SIZES </= 80mm MAY BE <500MM, SUBJECT TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY & CONSTRUCTION ACCESS REQUIREMENTS.
12. WATERMAIN PIPES SHALL BE SUBJECT TO IRISH WATER REQUIREMENTS:
 (a) DUCTILE IRON PIPES AND FITTINGS COMPLYING WITH I.S. EN 545.
 (b) POLYETHYLENE PIPES AND FITTINGS COMPLYING WITH I.S. EN 12201: 2011.
13. SERVICE PIPES SHALL HAVE A MINIMUM 12mm INTERNAL DIAMETER & SHALL BE ONE OF THE FOLLOWING TYPES, UNLESS OTHERWISE APPROVED:
 (a) ANNEALED COPPER COMPLYING WITH BS EN 1057: 2006, TABLE Y.
 (b) POLYETHYLENE PIPE TYPE 32 COMPLYING WITH IS EN 12201:2011 HEAVY GAUGE.
 (c) POLYETHYLENE PIPE TYPE 50 COMPLYING WITH IS EN 12201:2011. FITTINGS & SPECIALS SHALL BE APPROVED BY ENGINEER.

STOPCOCKS

14. STOPCOCKS COMPLYING WITH BS 5433 SHALL BE PROVIDED ON EACH SERVICE PIPE. STOPCOCKS SHALL BE LOCATED IN FOOTPATH FRONTING THE PROPERTY BEING SERVED. THE DEPTH OF THE STOPCOCK SPINDLE SHALL NOT EXCEED 200mm.

SLUICE VALVES

15. SLUICE VALVE CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO I.S. 261 AND B.S. 5834. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO THE APPROVAL OF IRISH WATER.
16. SLUICE VALVES SHALL BE RESILIENT SEATED AND SHALL COMPLY WITH BS 5163-1, BS 5163-2, BS EN 1074-1, BS EN 1074-2, OR EQUIVALENT E.U. SPECIFICATIONS.
17. ALL SLUICE VALVES SHALL BE ANTI-CLOCKWISE CLOSING.
18. VALVE CHAMBER TO BE CONSTRUCTED OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCK WORK. ALTERNATIVELY, PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO APPROVAL FROM 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 C 30/37, WITH A MINIMUM THICKNESS OF 150mm. ALTERNATIVELY, PRE-CAST CONCRETE ROOFS MAY BE USED, SUBJECT TO UISCE EIREANNREVIEW, & COMPLIANCE WITH BS 5911, PART 4 IN CONJUNCTION WITH BS EN 1917:2002.
19. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150mm COMPACTED CLAUSE 808 MATERIAL AS PER STD-W-13.
20. 200mm ALL AROUND, 100mm DEEP CONCRETE PLINTH AROUND COVERS IN GREEN AREAS.
21. THRUST BLOCKS TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES, BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.
22. ANTI-CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
23. ALL CONCRETE TO BE IN ACCORDANCE WITH I.S. EN 206.
24. 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.
25. ALL THRUST FLANGES TO BE ADEQUATELY RESTRAINED BY THRUST BLOCKS AS PER DRAWING No. STD-W28.
26. 450 x 450mm INTERNAL DIMENSION CHAMBERS MAY BE PROVIDED SUBJECT TO REVIEW BY IRISH WATER. SUCH CHAMBERS SHALL BE PROVIDED WITH GRADE "A" HEAVY DUTY COVER AND FRAME AND STAMPED "SV".
27. REFER TO UISCE EIREANN STD-W-14 AND 15 FOR CONSTRUCTION DETAILS.

HYDRANTS

28. HYDRANT CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO I.S. 261 OR B.S. 5834. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO THE APPROVAL OF UISCE EIREANN.
29. HYDRANTS SHALL BE DOUBLE FLANGED DRILLED TO PIN 16. THEY SHALL COMPLY WITH BS 750: 2012. THE HYDRANT SHALL INCORPORATE A SCREW DOWN GATE VALVE, UNDERGROUND "GUIDE TO HEAD" TYPE WITH SCREW DOWN CONNECTION OUTLET AND FALSE SPINDLE CAP AND IRON CHAIN.
30. ALL HYDRANTS SHALL BE CLOCKWISE CLOSING.
31. HYDRANT CHAMBER TO BE CONSTRUCTED OF PRECAST CONCRETE UNITS OR HIGH DENSITY BLOCK WORK. ALTERNATIVELY, PROPRIETARY PREFABRICATED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO APPROVAL FROM UISCE EIREANN. ROOF SLABS SHALL BE DESIGNED TO CARRY ALL LIVEL LOADS & DEAD LOADS, & CONSIST OF A REINFORCED CONCRETE SLAB OF IN-SITU CONCRETE, GRADE C 30/37, WITH A MINIMUM THICKNESS OF 150mm. ALTERNATIVELY, PRE-CAST CONCRETE ROOFS MAY BE USED. SUBJECT TO UISCE EIREANN REVIEW, & COMPLIANCE WITH BS EN 1917:2002.
32. CONCRETE CHAMBERS SHALL BE SURROUNDED BY A MINIMUM OF 150MM COMPACTED CLAUSE 808 MATERIAL AS PER STD-W-13.
33. 200MM ALL AROUND, 100MM DEEP CONCRETE PLINTH WITH AROUND COVERS IN GREEN AREAS.
34. DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH IS EN 545. PE PIPES AND FITTINGS TO BE IN ACCORDANCE IS EN 12201:2011.
35. THRUST BLOCKS TO BE PROVIDED AS PER STANDARD DRAWING STD-W-28 AT ALL TEES, BENDS, TAPERS, DEAD ENDS AND PIPES AT STEEP SLOPES.
36. ANTI-CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.
37. ALL CONCRETE TO BE IN ACCORDANCE WITH UE EN 206.
38. REFER TO UISCE EIREANN STD-W-16 TO 19 FOR CONSTRUCTION DETAILS.

AIR VALVES

39. REFER TO UISCE EIREANN STD-W-20 TO 23 FOR CONSTRUCTION DETAILS.

INDICATOR PLATES & MARKER POSTS

40. REFER TO UISCE EIREANN STD-W-27 FOR DETAILS OF ALL MARKER POSTS/PLATES.

PRESSURE REDUCING/SUSTAINING VALVE CHAMBER

41. REFER TO UISCE EIREANN STD-W-24 FOR CONSTRUCTION DETAILS.

BOOSTER PUMP STATION ARRANGEMENT

42. REFER TO UISCE EIREANN STD-W-25 FOR CONSTRUCTION DETAILS.

METER CHAMBER

43. REFER TO UISCE EIREANN STD-W-26 & 26A FOR CONSTRUCTION DETAILS. METER SPECIFICATION TO IRISH WATER APPROVAL.

THRUST AND SUPPORT BLOCKS

44. REFER TO UISCE EIREANN STD-W-28 FOR CONSTRUCTION DETAILS.

OTHER

45. ANY SPECIAL ROAD REINSTATEMENT AROUND COVER AND FRAME SHALL BE TO ROAD AUTHORITY'S REQUIREMENTS.
46. NEW ROAD CONSTRUCTION & SURFACE FINISH TO BE TO ROAD AUTHORITY'S REQUIREMENTS.
47. 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.
48. REFER TO UISCE EIREANN STD-W-29 TO 37 FOR DUCT CHAMBER, SCOUR CHAMBER AND HEAD WALL ARRANGEMENT, DUCT/STREAM/BRIDGE CROSSINGS, SECURITY GATES AND FENCING, PIPE REPAIRS, TELEMETRY AND KIOSK AND LAMP BOLLARD STANDARD CONSTRUCTION DETAILS.

Rev	Date	Description	By	Chkd.
P01	17.08.2026	Issue for Planning	GC	SB

Client: Galway County Council

Project: Housing Development at Cosmona, Loughrea, Co. Galway Phase 2

Title: Standard Watermain Details

Scale @ A1: 1:250

Prepared by: GC | Checked by: SB | Date: 17.08.2026

Drawing Status: Planning

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Drawing No.: 11942-2107

Revision: P01