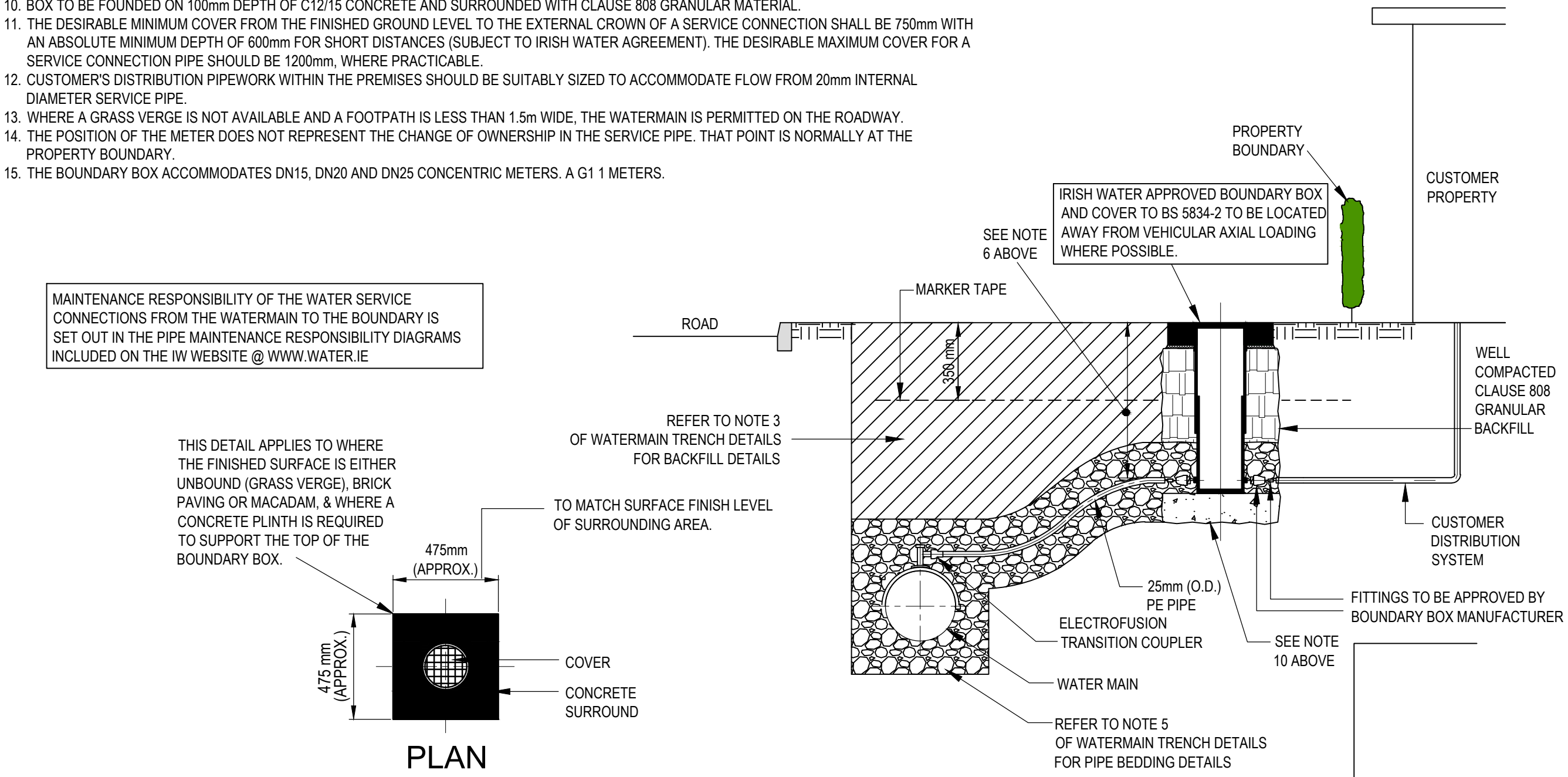
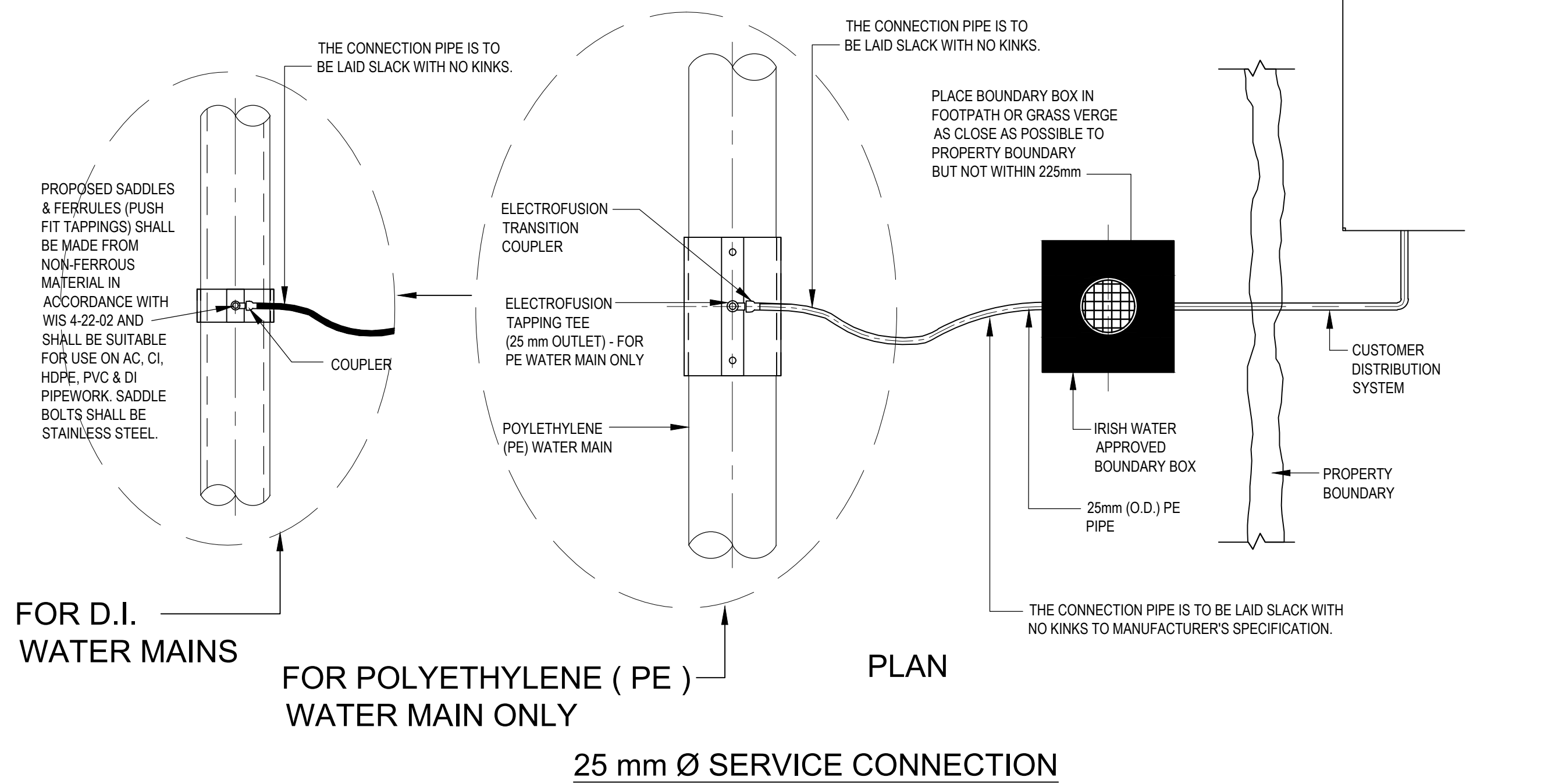


- GENERAL NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.
 2. FOR CONNECTION TO AN EXISTING MAIN THE CONNECTION SHALL BE AS PER THE PIPE MANUFACTURER'S SPECIFICATION.
 3. ELECTRO FUSION COUPLING TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 4. ALL CONCRETE TO BE IN ACCORDANCE WITH IS EN 206.

- BOUNDARY BOX NOTES:
1. THE BOUNDARY BOX IS TO BE IN ACCORDANCE WITH THE IRISH WATER SPECIFICATION, INCORPORATING A G1.5 MANIFOLD, STOP-TAP, FROST PLUG & 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 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.
 7. 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.
 8. THE PIPE FITTINGS TO THE BOUNDARY BOX SHALL BE APPROVED BY THE BOUNDARY BOX MANUFACTURER.
 9. THE BOUNDARY BOX SHALL BE INSTALLED HYGIENICALLY & LEFT CLEAN & 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 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 DESIRABLE MAXIMUM COVER FOR A SERVICE CONNECTION PIPE SHOULD BE 1200mm, WHERE PRACTICABLE.
 12. CUSTOMER'S DISTRIBUTION PIPEWORK WITHIN THE PREMISES SHOULD BE SUITABLY SIZED TO ACCOMMODATE FLOW FROM 20mm INTERNAL DIAMETER SERVICE PIPE.
 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 IS NORMALLY AT THE PROPERTY BOUNDARY.
 15. THE BOUNDARY BOX ACCOMMODATES DN15, DN20 AND DN25 CONCENTRIC METERS. A G1 1 METERS.



CONCRETE SURROUND TO BOUNDARY BOX COVER

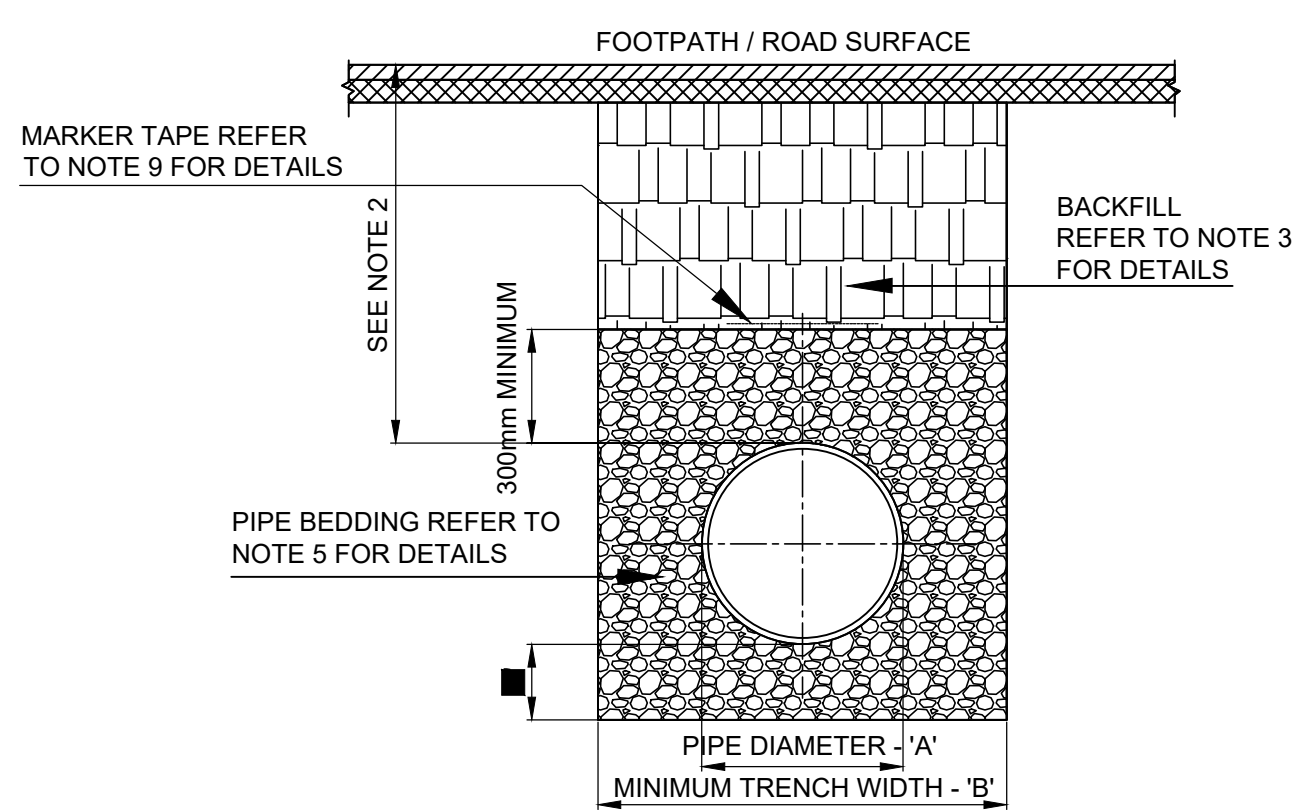


FOR D.I. WATER MAINS

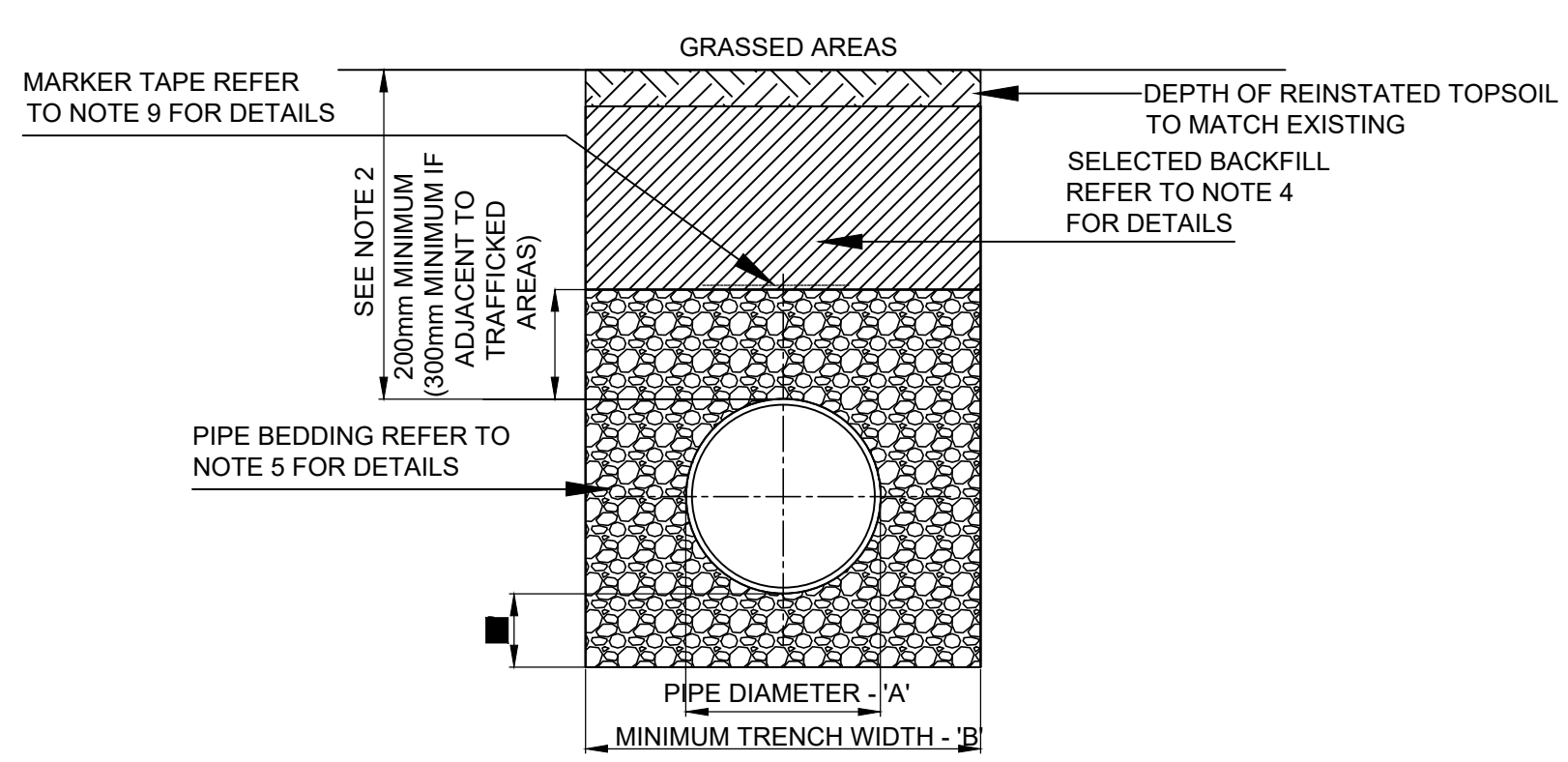
FOR POLYETHYLENE (PE) WATER MAIN ONLY

25 mm Ø SERVICE CONNECTION

- NOTES:
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 750mm FOR SERVICE CONNECTIONS, 900mm FOR WATER MAINS. 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 MAXIMUM COVER SHOULD NOT EXCEED 1,200mm WHERE PRACTICABLE.
 3. CLAUSE 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 808 IS TO BE COMPACTED AS PER CLAUSE 802 OF THE NATIONAL ROADS AUTHORITY SPECIFICATION FOR ROAD WORKS.
 4. SELECTED EXCAVATED MATERIAL MAY BE USED IN GREEN-FIELD AREAS ABOVE GRANULAR PIPE SURROUND MATERIAL SUBJECT TO THE APPROVAL OF IRISH WATER.
 5. 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.
 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 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.
 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 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. 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.
 10. TRENCH WIDTHS FOR PIPE SIZES 150mm TO 450mm TO BE TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY & CONSTRUCTION ACCESS REQUIREMENTS.



CROSS SECTION IN ROADWAYS



CROSS SECTION IN GRASSED AREAS

WATERMAIN TRENCH DETAILS

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



PROJECT

Phase 1
Corrib Causeway
Dyke Road, Galway

Galway City Council

CONSULTANT

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BLOCK 6, GALWAY TECHNOLOGY PARK
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NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT ARCHITECTURAL AND ENGINEERING DRAWINGS. ANY DISCREPANCIES, ERRORS OR OMISSIONS TO BE BROUGHT TO THE ATTENTION OF THE DESIGNER.
2. ALL DIMENSIONS TO BE CHECKED BY THE CONTRACTOR ON SITE PRIOR TO COMMENCEMENT OF WORKS.
3. AECOM LIMITED TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF WORKS ON SITE.
4. DIMENSIONS OF ALL BOUNDARIES AND ADJOINING ROADS TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF WORKS.
5. DO NOT SCALE. ALL MEASUREMENTS AND COORDINATES TO BE CHECKED ON SITE.
6. RIGID INCLUSION GROUND IMPROVEMENT TECHNIQUES TO BE EMPLOYED PRIOR TO THE CONSTRUCTION OF ANY ROADS OR BELOW GROUND SERVICES. REFER TO STRUCTURAL ENGINEERS DRAWINGS FOR DETAILS.
7. THE DEVELOPMENT IS TO HAVE A BULK WATER METER (EXACT LOCATION TO BE AGREED WITH UIUCE EIREANN) IN ACCORDANCE WITH UIUCE EIREANN CODE OF PRACTICE SECTION 3.15.4.
8. THE CONNECTION POINT IS TO HAVE A METER INSTALLED IN ACCORDANCE WITH THE UIUCE EIREANN CODE OF PRACTICE FOR WATER INFRASTRUCTURE SECTION 3.15.2.
9. ALL PROPOSED WATERMAIN PIPEWORK TO BE HDPE WITH MINIMUM PE80 RATING IN ACCORDANCE WITH UIUCE EIREANN CODE OF PRACTICE FOR WATER INFRASTRUCTURE SECTION 3.16.5.
10. THE MINIMUM PIPE DIAMETER PROPOSED IS 150mm.
11. ALL WATERMANS WILL HAVE A MINIMUM COVER OF 900mm. ALL SERVICE PIPES CONNECTING PROPERTIES WILL HAVE MINIMUM COVER OF 750mm.
12. HYDRANTS SHALL BE DOUBLE FLANGED DRILLED TO PN16 AND SHALL COMPLY WITH BS EN 14339, IS EN 1074 PART 6 AND 135 750 REFER TO UIUCE EIREANN CODE OF PRACTICE FOR WATER INFRASTRUCTURE SECTION 3.16.5.
13. SLUICE VALVES HAVE BEEN PROVIDED SO THAT INDIVIDUAL SECTIONS CAN BE ISOLATED & WILL COMPLY TO BS 5163. THE DEPTH OF THE SLUICE VALVE SPINDLE CAP BELOW FINISHED GROUND WILL NOT EXCEED 300mm.
14. ALL WATERMAIN DETAILS TO BE IN ACCORDANCE WITH THE UIUCE EIREANN INFRASTRUCTURE STANDARD DETAILS AND CODE OF PRACTICE FOR WATER INFRASTRUCTURE.
15. ALL WATERMAIN WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH UIUCE EIREANN STANDARD DETAIL AND THE CODE OF PRACTICE FOR WATER INFRASTRUCTURE DOCUMENT CDS-5030-03.
16. ALL PIPE MATERIALS SHALL BE IN COMPLIANCE WITH SECTION 3.9 OF UIUCE EIREANN CODE OF PRACTICE DOCUMENT CDS-5020-03.
17. INDIVIDUAL WATER SERVICE CONNECTIONS AND BOUNDARY BOXES TO EACH DWELLING SHALL BE IN COMPLIANCE WITH UIUCE EIREANN STANDARD DETAIL STD-W-02.
18. SEPARATION DISTANCES FROM OTHER SERVICES, BOUNDARY WALLS ETC. SHALL BE IN ACCORDANCE WITH UIUCE EIREANN STANDARD DETAIL STD-W-11.
19. SEPARATION DISTANCES FROM TREES, SHRUBS ETC. SHALL BE IN ACCORDANCE WITH UIUCE EIREANN STANDARD DETAIL STD-W-12 & 12A.
20. ON-LINE AND OFF-LINE AIR VALVE DETAILS SHALL BE IN ACCORDANCE WITH UIUCE EIREANN STANDARD DETAIL STD-W-22 & STD-W-23 RESPECTIVELY.
21. SLUICE VALVE DETAILS SHALL BE IN ACCORDANCE WITH UIUCE EIREANN STANDARD DETAIL STD-W-18 & STD-W-19 RESPECTIVELY.
22. ON-LINE AND OFF-LINE HYDRANT DETAILS SHALL BE IN ACCORDANCE WITH UIUCE EIREANN STANDARD DETAIL STD-W-18 & STD-W-19 RESPECTIVELY.
23. 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.
24. SCOUR VALVE AND CHAMBER DETAILS SHALL BE IN ACCORDANCE WITH UIUCE EIREANN STANDARD DETAIL STD-W-30.

PURPOSE

P3 PLANNING

ISSUE/REVISION

NO	DATE	DESCRIPTION
01	26.02.2025	FOR PLANNING
1/R	DATE	DESCRIPTION

PROJECT NUMBER

60710277

SHEET TITLE

TYPICAL WATERMAIN DETAILS
(SHEET 01)

SHEET NUMBER

60710277-ACM-XX-XX-DR-CE-10-2750

