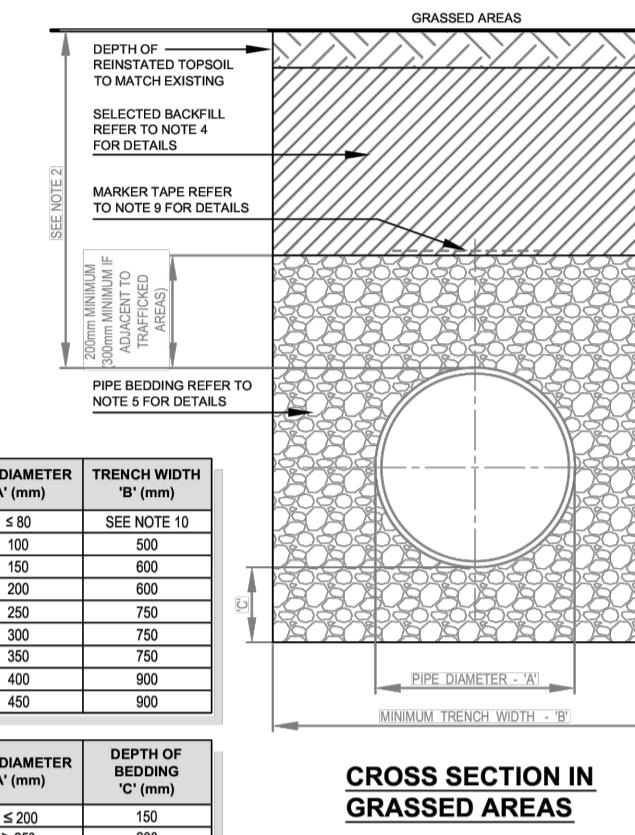
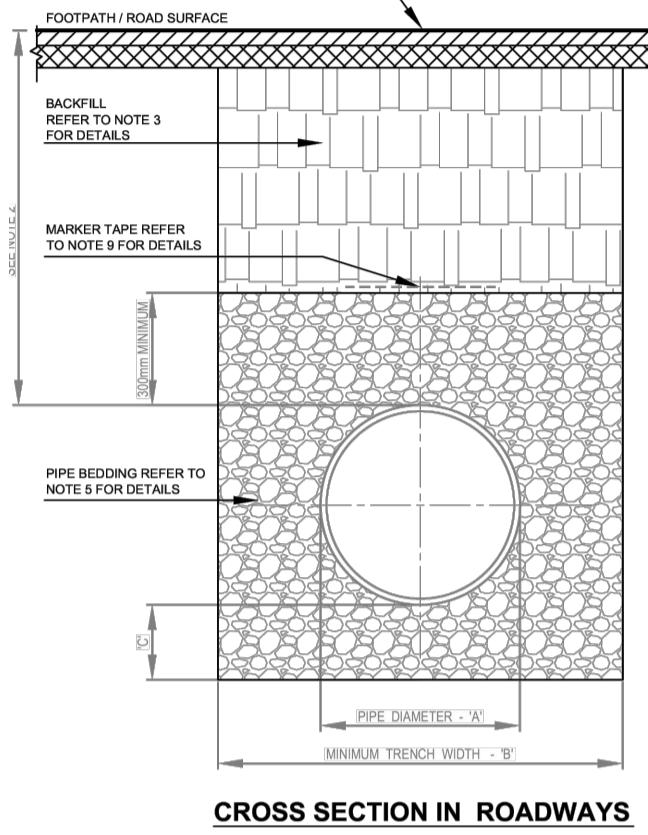


1. ALL DIMENSIONS ARE IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.  
2. THE DEPTH OF THE TRENCH IS TO BE 1000MM. THE EXTERNAL CROWN OF THE PIPE SHALL BE 500MM WHERE THE PIPE IS TO BE LOCATED IN A HOUSING ESTATE ROADS, GREATER DEPTH OF 1000MM IS TO BE PROVIDED FOR STRENGTH AND A HIGHER CLASS OF BEDDING MATERIAL IS ANTICIPATED. THE DESIRABLE COVER FOR A WATERMAIN SHOULD BE 1200MM, WHERE PRACTICAL & SHOULD NOT EXCEED 3000MM.  
3. COLLECTOR DRAINS AND SEWER DRAINS ARE TO BE PROVIDED IN ACCORDANCE WITH THE ROAD AUTHORITY SPECIFICATION FOR ROAD WORKS IS 101A & IS 1012 OR EQUIVALENT TO SPECIFICATIONS.  
4. ALL SLICE VALVES SHALL BE AUTO-CLOSE ON CLOSURE.  
5. VACUUM BREAKERS SHALL BE PROVIDED IN CONCRETE UNITS OR HIGH DENSITY BLOCKWORK, ALTERNATIVELY PROPERLY PRECASTED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO REVIEW BY IRISH WATER. ROOF SLAB SHALL BE DESIGNED TO CARRY ALL LIVE LOADS & DEAD LOADS & CONSIST OF A REINFORCED CONCRETE SLAB AS PER IS EN 12201. PRECAST CONCRETE ROOFS MAY BE USED, SUBJECT TO REVIEW BY IRISH WATER. PRECAST CONCRETE ROOFS MAY BE USED, SUBJECT TO IRISH WATER REVIEW, A COMPENSATION FOR THE LOSS OF PRECAST CONCRETE ROOF SLABS DUE TO THE USE OF PRECAST CONCRETE ROOFS IS TO BE PROVIDED.  
6. SELECTED EXCAVATED MATERIALS SHOULD BE REUSED IN THE TRENCH, UNLESS OTHERWISE ADVISED.  
7. PIPE BEDDING SHALL BE A MINIMUM OF 100MM COMPACTED CLASSE 808 MATERIAL AS PER STD-W-13.  
8. DUCTILE IRON PIPES AND FITTINGS TO BE IN ACCORDANCE WITH EN 545. PE PIPES AND FITTINGS TO BE IN ACCORDANCE WITH EN 12201.  
9. PIPE BEDDING REFER TO NOTE 5 FOR DETAILS.  
10. SUPPORT ARRANGEMENTS, INCLUDING PLUNGS ETC. MAY BE REQUIRED WHERE THE SOFT OF SOFT MATERIAL IS EXCESSIVE. SUCH ARRANGEMENTS SHALL BE SUBJECT TO ASSESSMENT BY IRISH WATER.  
11. ANTI-CORROSION TAPE TO BE PROVIDED AROUND BURIED FLANGES.  
12. 45° & 90° INTERNAL DIMENSION CHAMBERS MUST BE PROVIDED SUBJECT TO IRISH WATER. SUCH CHAMBERS SHALL BE PROVIDED WITH GRADE "A" HEAVY DUTY CONCRETE UNITS OR HIGH DENSITY BLOCKWORK.  
13. ANY SPECIAL ROAD RETAINMENT ARRANGEMENT COVER & FRAME SHALL BE PROVIDED BY ROAD AUTHORITY'S REQUIREMENTS.  
14. NO MARKER TAPE TO BE 400MM WIDE BLUE POLYETHYLENE MATERIAL IN ACCORDANCE WITH EN 2165. PLASTIC PIPES SHALL HAVE WARNING TAPE INCORPORATED A REINFORCED BAND BRACING WIRE. SERVICE PIPE BEDDING REFER TO NOTE 5.  
15. EXISTING ROAD RETAINMENT TO COMPLY WITH CURRENT VERSION OF GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS BY THE DEPT. OF TRANSPORT, TOURISM & SPORT, & TRANSPORT INFRASTRUCTURE IRELAND REQUIREMENTS.  
16. NO MARKER TAPE TO BE PROVIDED TO ROAD AUTHORITY REQUIREMENTS.  
17. TRENCH WIDTHS FOR PIPE SIZE 300mm MAY BE 500mm, SUBJECT TO CONSIDERATION BEING GIVEN TO THE TRENCH DEPTH, HEALTH & SAFETY & CONSTRUCTION ACCESS REQUIREMENTS.  
18. EXISTING ROAD RETAINMENT TO COMPLY WITH CURRENT VERSION OF GUIDELINES FOR MANAGING OPENINGS IN PUBLIC ROADS BY THE DEPT. OF TRANSPORT, TOURISM & SPORT, & TRANSPORT INFRASTRUCTURE IRELAND REQUIREMENTS.

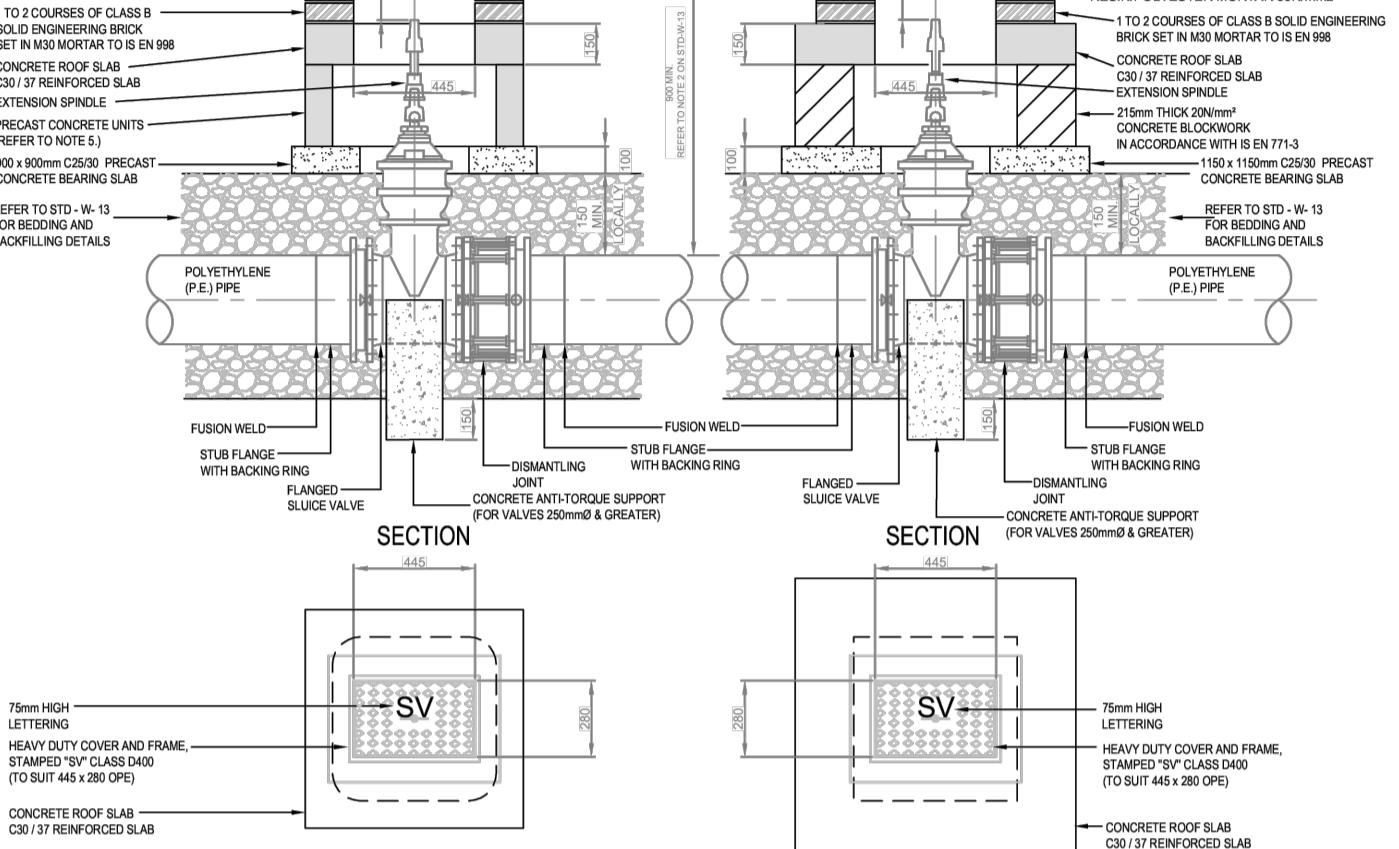
#### SEE NOTES 11 & 12



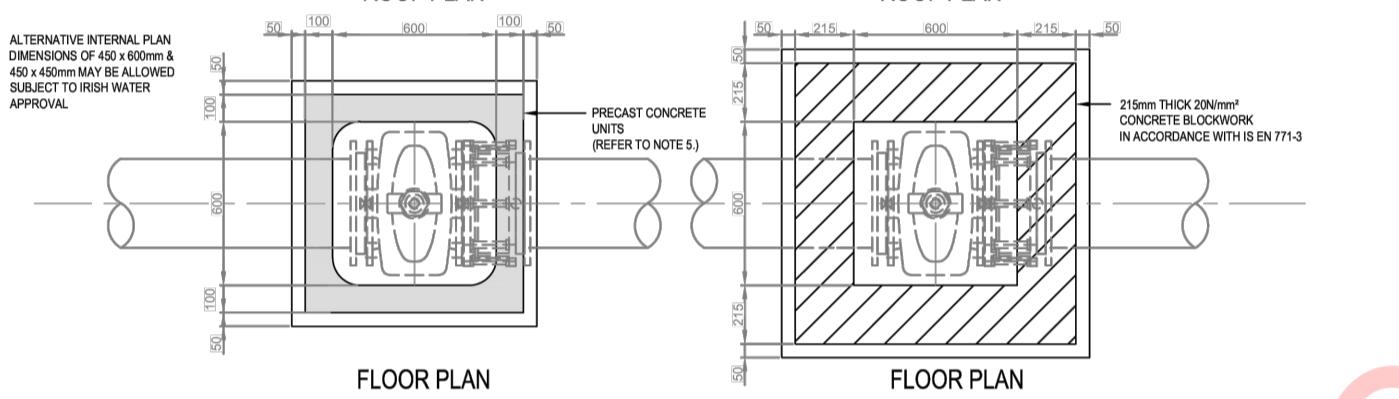
1. ALL DIMENSIONS IN MILLIMETRES (mm) UNLESS NOTED OTHERWISE.  
2. SLICE VALVE CHAMBERS SHALL BE COVERED WITH APPROVED HEAVY DUTY METAL COVERS TO IS 261 OR BS 5848-6H. COVER AND FRAME SHALL BE SUITABLE FOR ROAD AND TRAFFIC CONDITIONS AND IS SUBJECT TO REVIEW BY IRISH WATER.  
3. DRAINAGE UNITS SHALL BE PROVIDED IN ACCORDANCE WITH IS 101A & IS 1012 OR EQUIVALENT TO SPECIFICATIONS.  
4. ALL SLICE VALVES SHALL BE AUTO-CLOSE ON CLOSURE.  
5. VACUUM BREAKERS SHALL BE PROVIDED IN CONCRETE UNITS OR HIGH DENSITY BLOCKWORK, ALTERNATIVELY PROPERLY PRECASTED CHAMBER UNITS MAY ALSO BE USED, SUBJECT TO REVIEW BY IRISH WATER. ROOF SLAB SHALL BE DESIGNED TO CARRY ALL LIVE LOADS & DEAD LOADS & CONSIST OF A REINFORCED CONCRETE SLAB AS PER IS EN 12201. PRECAST CONCRETE ROOFS MAY BE USED, SUBJECT TO REVIEW BY IRISH WATER. PRECAST CONCRETE ROOFS MAY BE USED, SUBJECT TO IRISH WATER REVIEW, A COMPENSATION FOR THE LOSS OF PRECAST CONCRETE ROOF SLABS DUE TO THE USE OF PRECAST CONCRETE ROOFS IS TO BE PROVIDED.  
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#### SEE NOTES 11 & 12

#### PLINTH DETAIL IN GRASS AREA



#### CROSS SECTION IN ROADWAYS



#### SECTION

#### SECTION