



NOTES

1. ALL JOINTS ENCOUNTERED WITHIN THE SPECIFIED RESTRAINING LENGTH "L" SHALL BE RESTRAINED FROM THE FIRST JOINT ON FITTING.
2. GRANULAR THRUST BLOCKS SHALL BE FULLY EXTENDED AND COMPACTED AGAINST TRENCH WALLS. IF TRENCH WALL ARE SATURATED OR DISTURBED, SPECIAL DESIGN DETAILS OF THRUST RESTRAINT SHALL BE PROVIDED BY THE ENGINEER FOR REVIEW BY THE REGION.
3. GRANULAR THRUST BLOCKS SHALL BE ENCLOSED WITH FILTER FABRIC IF GROUND WATER TABLE IS ABOVE THE TRENCH BED OR IF GROUND WATER IS SEEPING THROUGH TRENCH WALLS.
4. WHEN FITTINGS ARE PARTIALLY OR FULLY EXPOSED UNDER PRESSURE, ALL JOINTS MUST BE RESTRAINED.
5. ALL FITTING JOINTS SHALL BE RESTRAINED IN EARTH FILL APPLICATIONS.
6. CATHODIC PROTECTION, BONDING CABLE AND TRACER WIRE SHALL BE AS PER S-201.030, S-201.031.
7. ALL SIDES SHALL BE RESTRAINED FOR IN LINE TEES.
8. JOINT RESTRAINTS ARE NOT REQUIRED FOR STRAIGHT RUNS IN ENGINEERED FILL APPLICATIONS.

| PIPE DIA. | "L" MIN. RESTRAINING LENGTH (m) |
|-----------|---------------------------------|
| 100&150 | 15.2 |
| 200 | 19.6 |
| 300 | 27.7 |
| 400 | 36.3 |

ALL DIMENSIONS IN MILLIMETRES EXCEPT WHERE NOTED.



**THRUST BLOCK
FOR HYDRANT RUNOUTS, TEES
AND DEAD ENDS**

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| DWG. DATE: 1991 11 |
| REVISION NO.: 12 |
| REV. DATE: 2018 05 |
| SCALE: N.T.S. |
| S-200.060 |