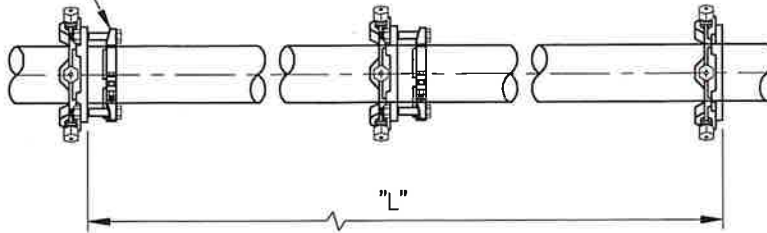


DUCTILE IRON
RESTRAINED JOINT
(TYP.)



PIPE SIZE IN INCHES	4	6	8	12	16	18	20	24
RESTRAINED LENGTH "L" IN FEET	104	148	191	240	309	342	374	438

DEAD END

NOTES:

1. ALL JOINT WITHIN LENGTH "L" SHALL BE RESTRAINED.
2. ASSUMED DEPTH OF COVER FOR 8" PIPE OR LESS TO BE 3.5' MIN. (42"); 16" PIPE OR GREATER TO BE 4.0'MIN. (48").
3. ASSUMPTIONS FOR DETERMINING LENGTH SHOWN:
 - TEST PRESSURE: 225PSI
 - TYPE 4 LAYING CONDITIONS
 - A SAFETY FACTOR OF 2
 - SAND/SILT SOIL CONDITIONS
 - POLYETHYLENE WRAP
4. LENGTH CALCULATED USING DIPRA RESTRAINT JOINT PROGRAM
5. IF ACTUAL CONDITIONS DIFFER FROM THOSE LISTED ABOVE OR THE REQUIRED RESTRAIN LENGTH CANNOT BE MET, THE RESTRAINED LENGTH SHALL BE DETERMINED BY THE DESIGN ENGINEER AND CONCURRED WITH THE CITY ENGINEER
6. RESTRAINS INSTALLED PER SECTION 2-02.03 OR 2-12.

RESTRAINT OF JOINTS FOR DUCTILE IRON AND PVC PIPE AT A DEAD END OR EACH SIDE OF VALVE

CITY OF MONTEREY PARK

PUBLIC WORKS DEPARTMENT-WATER DIVISION

STANDARD NO.

W-139

DRAWN	BY AM	DATE 10/02/24	APPROVED WATER UTILITY MANAGER	DATE 12/10/24
REVISIONS	DZ	10/02/24		
CHANGED	XX	XX/XX/XX	APPROVED CITY ENGINEER	DATE 12/11/24

SHEET 1 OF 1