ALLOWABLE LEAKAGE IN GAL/HR FOR 1000' OF PVC OR DUCTILE IRON PIPE

	AVERAGE TEST PRESSURE IN PIPELINE, PSI									
NOMIN AL PIPE SIZE (IN)	<u>150</u>	<u>175</u>	200	225	<u>250</u>	<u>275</u>	300	<u>350</u>	400	<u>450</u>
2	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.25	0.27	0.29
3	0.25	0.27	0.29	0.30	0.32	0.34	0.35	0.38	0.41	0.43
4	0.33	0.36	0.38	0.41	0.43	0.45	0.47	0.51	0.54	0.57
6	0.50	0.54	0.57	0.61	0.64	0.67	0.70	0.76	0.81	0.86
8	0.66	0.72	0.76	0.81	0.85	0.90	0.94	1.01	1.08	1.15
10	0.83	0.89	0.96	1.01	1.07	1.12	1.17	1.26	1.35	1.43
12	0.99	1.07	1.15	1.22	1.28	1.34	1.40	1.52	1.62	1.72
14	1.16	1.25	1.34	1.42	1.50	1.57	1.64	1.77	1.89	2.01
16	1.32	1.43	1.53	1.62	1.71	1.79	1.87	2.02	2.16	2.29

NOTES:

- THE ALLOWABLE LEAKAGE FOR TEST SECTIONS WITH DIFFERENT DIAMETERS IS THE SUM OF THE COMPUTED LEAKAGE FOR EACH PIPE SIZE.
- 2) MINIMUM TEST TIME SHALL BE TWO HOURS.
- 3) THE MAXIMUM ALLOWABLE LEAKAGE FOR THE WATER MAIN WILL BE CALCULATED USING THE FOLLOWING FORMULA:

WHERE: L =
$$\frac{D * S * \sqrt{P}}{148,000}$$

- L = MAX ALLOWABLE LEAKAGE IN GAL/HR
- S = LENGTH OF PIPE IN TEST SECTION IN FEET
- D = NOMINAL DIAMETER OF TESTED PIPE IN INCHES
- P = TEST PRESSURE IN PSI
- 4) TEST PRESSURE SHALL BE 150 PSI OR 1-1/2 TIMES THE WORKING PRESSURE OF THE MAIN, WHICHEVER IS GREATER. TEST PRESSURE IS TO BE MEASURED AT THE POINT OF HIGHEST ELEVATION OF THE TESTED MAIN SECTION.
- 5) LINE SECTIONS ARE TO BE TESTED SEPARATELY IN CASES WHERE SIGNIFICANT ELEVATION CHANGES OCCUR ALONG A LINE THAT WILL RESULT IN SIGNIFICANTLY DIFFERENT TEST PRESSURES AND/OR WHERE WATERLINE MATERIALS CHANGE DUE TO PRESSURE CHANGES. THE PSA RESERVES THE RIGHT TO REQUIRE SEPARATE TESTING FOR SECTIONS OF MAIN LINE.
- 6) NO MORE THAN 1000 LINEAR FEET OF LINE IS TO BE TESTED AT ANY ONE TIME.



ALLOWABLE LEAKAGE TABLE FOR WATERLINES & SEWER FORCEMAINS EFFECTIVE 07/2024

DETAIL NO. 401