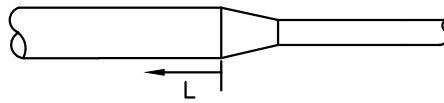


## REDUCER



L = RETAINED LENGTH AT LARGER SIZE OF REDUCER (FEET)														
DIAMETER	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"	42"	48"
4"		29	52	71	89	105	121	136	151	179	217	253	285	318
6"			31	53	74	93	111	127	143	172	211	249	282	315
8"				29	54	76	96	114	131	163	204	243	277	310
10"					30	55	78	98	117	151	195	235	271	305
12"						30	56	79	100	137	184	226	263	299
14"							30	56	79	120	171	216	255	292
16"								30	56	101	156	204	245	283
18"									30	80	140	190	233	273
20"										56	121	175	221	263
24"											78	141	192	238
30"												78	140	194
36"													75	139
42"														75

**NOTES:**

1. THE REQUIREMENTS SET FORTH ABOVE WERE CALCULATED FOR PVC PIPE BASED UPON THE FOLLOWING ASSUMPTIONS:
  - SOIL CONDITIONS: SILTY SAND (SM)
  - TRENCH TYPE: 3 (PIPE BEDDED IN 4" MINIMUM OF LOOSE SOIL WITH BACKFILL LIGHTLY COMPACTED)
  - MINIMUM COVER: 3 FT
  - SAFETY FACTOR: 1.5
  - TEST PRESSURE: 150 PSI
2. IF FIELD CONDITIONS DIFFER FROM THE ABOVE, THE ENGINEER-OF-RECORD (EOR) SHALL SUBMIT CALCULATIONS BASED ON THE FIELD CONDITION FOR REVIEW AND APPROVAL OF SLWSD.



**MINIMUM CONSTRUCTION STANDARDS FOR  
ST. LUCIE WEST SERVICES DISTRICT  
450 SW UTILITY DRIVE,  
PORT SAINT LUCIE, FL 34986  
PHONE: (772) 340-0220**

## PIPELINE RESTRAINT REQUIREMENTS (REDUCER)

<b>DETAIL: SLWG-07</b>
<b>DATE: 03/2020</b>
<b>SCALE: N.T.S.</b>
<b>SHEET: 1 OF 1</b>