



PZ23-12000017  
03/05/2025



## WATER PIPE IDENTIFICATION

### RESTRAINED JOINT INFORMATION

GENERAL NOTES:

1. ALL NONMETALLIC PIPE SHALL BE INSTALLED WITH 12 THHN SOLID COPPER TRACING WIRE.
2. THE MARKER BALLS MUST BE INSTALLED DIRECTLY ABOVE THE PIPE.
3. MARKER BALLS SHALL BE INSTALLED AT 40' O.C.
4. BALL COLOR CODING:  
POTABLE WATER SYSTEM: BLUE PER 62-555.320(21)(b)(3) F.A.C.

## UTILITY PIPE AND MARKER BALLS LOCATION

PVC HORIZONTAL BENDS AND VERTICAL UP BENDS					
		RESTRAINED JOINT LENGTH L (MINIMUM DISTANCE IN FEET FROM FITTING – EACH WAY)			
PIPE SIZE (IN.)	BENDS				CROSS WITH PLUG DEAD END TEE /W/
	90°	45°	22.5°	11.25°	
6	26	11	6	3	53
8	33	14	7	4	68
12	46	19	10	5	96

PVC VERTICAL DOWN BEND				
	RESTRAINED JOINT LENGTH L (MINIMUM DISTANCE IN FEET FROM FITTING - EACH WAY)			
PIPE SIZE (IN.)	BENDS			
	90°	45°	22.5°	11.25°
6	26	11	6	3
8	33	14	7	4
12	46	19	10	5

DIP HORIZONTAL BENDS AND VERTICAL UP BENDS					
	RESTRAINED JOINT LENGTH L (MINIMUM DISTANCE IN FEET FROM FITTING - EACH WAY)				
PIPE SIZE (IN.)	BENDS				CROSS WITH PLUS
	90°	45°	22.5°	11.25°	DEAD END TEL/WTE
12"	68	28	14	7	144
24"	119	49	24	12	258

DIP VERTICAL DOWN BEND				
		RESTRAINED JOINT LENGTH L (MINIMUM DISTANCE IN FEET FROM FITTING - EACH WAY)		
PIPE SIZE (IN.)	BENDS			
	90°	45°	22.5°	11.25°
12"	144	60	29	14
24"	258	107	51	25

### RESTRAINED JOINT INFORMATION

A MINIMUM HORIZONTAL SEPARATION 3' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN POTABLE WATER MAINS AND STORMWATER SEWERS, STORMWATER FORCE MAINS AND REGULATED REUSE WATER MAINS.

POTABLE WATER MAIN

10' MIN.

EXISTING OR PROPOSED VACUUM-TYPE  
SANITARY SEWER

A MINIMUM HORIZONTAL SEPARATION 3' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER. \* SEE NOTE D(1)(B).

POTABLE WATER MAIN

SANITARY OR STORMWATER SEWERS AND FORCE MAINS

\*\* MIN. 6'

A MINIMUM HORIZONTAL SEPARATION OF 6' (OUTSIDE TO OUTSIDE), SHALL BE MAINTAINED BETWEEN POTABLE WATER MAINS AND EXISTING OR PROPOSED GRAVITY-OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN OR NOT REGULATED REUSE WATER MAIN. \*\* SEE NOTE D(1)(C).

# MINIMUM HORIZONTAL SEPARATION REQUIREMENTS FOR POTABLE WATER, REUSE, STORMWATER AND SEWER LINES

[illegible]

**FIELD & WHEELER, INC.**  
CIVIL ENGINEERING - LAND PLANNING  
LANDSCAPE ARCHITECTURE - SURVEYING  
7900 GLADES ROAD - SUITE 100  
BOCA RATON, FLORIDA 33434  
PHONE (561)-392-1991 / FAX (561)-750-1452



**OAKS @ PALM AIRE**

**WATER DISTRIBUTION & SANITARY SEWER DETAILS**

**POMPANO BEACH, FLORIDA**

DATE	06/12/23
DRAWN BY	RHT
F.B./ PG.	N/A
SCALE	n.t.s.

RYAN D. WHEELER  
PROFESSIONAL ENGINEER  
LICENSE NO. 71477  
STATE OF FLORIDA  
- FOR THE FIRM -  
DATED Dec 11, 2024

JOB #10326
SHT.NO. <b>WS.04</b>
OF 8 SHEETS