## **GAINESVILLE REGIONAL UTILITIES - UTILITY SEPARATION REQUIREMENTS**

	Electric	Electric	GRUCom	GRUCom	Gas	Water	WW	WW	Reclaimed	Trees <sup>10</sup>	Lift Station	Structure	Transformer	Fire	Water	Street	Storm	Other
	Over	Under	Over Head	Under	Pipe	Main	Force	Gravity	Water Main		(Property			hydrant	Meter	light	Sewers	Underground
	Head	Ground		Ground			Main	Main			Line)							Utilities
Electric Overhead	NA	-	NA	-	-	3	3	10	3	7.5 <sup>9</sup>	10	NESC <sup>7</sup>	NA	-	-	NESC <sup>7</sup>	3	3
Electric Underground	-	1	-	1	2	3	3	10	3	10 <sup>11</sup>	10	10	NA	3	3	None	3	3
GRUCom Overhead	NA	-	NA	-	-	3	3	10	3	7.5 <sup>9</sup>	10	NESC <sup>7</sup>	NA	-	-	NESC <sup>7</sup>	3	3
GRUCom Underground	-	1	-	1	2	3	3	10	3	7.5 <sup>9</sup>	10	10	NA	3	3	None	3	3
Gas Pipe	-	2	-	2	2	3	3	10	3	7.5 <sup>9</sup>	10	5	None	3	3	3	3	3
Water Main	3	3	3	3	3	2	10	10	4	7.5 <sup>9</sup>	10	≥ 10	3 <sup>12</sup>	None	None	3	4	3
WW Force Main	3	3	3	3	3	10	2	10	4	7.5 <sup>9</sup>	10	≥ 10	3 <sup>12</sup>	10	10	3	4	3
WW Gravity Main	10	10	10	10	10	10	10	Depth <sup>3</sup>	10	10 <sup>9</sup>	15	≥ 15	15	10	10	10	10	10
Reclaimed Water Main	3	3	3	3	3	4	4	10	2	7.5 <sup>9</sup>	10	≥ 10	3 <sup>12</sup>	4	4	3	4	3
Trees <sup>10</sup>	7.5 <sup>9</sup>	10 <sup>11</sup>	7.5 <sup>9</sup>	7.5 <sup>9</sup>	7.5 <sup>9</sup>	7.5 <sup>9</sup>	7.5 <sup>9</sup>	10 <sup>9</sup>	7.5 <sup>9</sup>	NA	10	NA	10	7.5 <sup>9</sup>	7.5 <sup>9</sup>	7.5 <sup>9</sup>	-	7.5 <sup>9</sup>
Lift Station (Property Line)	10	10	10	10	10	10	10	15	10	10	NA	10	10	10	10	10	10	10
Structure	NESC <sup>7</sup>	10	NESC <sup>7</sup>	10	5	≥ 10	≥ 10	≥ 15	≥ 10	NA	10	NA	10	10	5	NA	10	10
Transformer	NA	NA	NA	NA	None	3 <sup>12</sup>	3 <sup>12</sup>	15	10	10	10	10	NA	10	5	NA	10	NA
Fire hydrant	-	3	-	3	3	None	10	10	4	7.5 <sup>9</sup>	10	10	10	NA	5	5	4	3
Water Meter	-	3	-	3	3	None	10	10	4	7.5 <sup>9</sup>	10	5	5	5	1.5	5	4	3
Street light	NESC <sup>7</sup>	None	NESC <sup>7</sup>	None	3	3	3	10	3	7.5 <sup>9</sup>	10	NA	NA	5	5	NA	3	-
Storm Sewers	3	3	3	3	3	4	4	10	4	-	10	10	10	3	3	3	NA	3
Other Underground Utilities	3	3	3	3	3	3	3	10	3	7.5 <sup>9</sup>	10	10	NA	3	3	-	3	1

## HORIZONTAL Separation Distances for PARALLEL Utilities and Perpendicular Clearance From Other Objects

Notes: 1. All Values are Distances in Feet - Measured Center-to-Center of pipes for typical cases.

2. Large diameter pipes (>10") require additional clearance to achieve separation required by underlying rules based on outside-to-outside dimensions

to be determined by GRU Engineering

3. Separation from gravity sewer is dependent on the depth of the main, which varies with application

4. NA = Not Applicable

5. Measurements from buildings (structures) and above ground objects (hydrants, transformers, poles, etc.) are from the furthest external protrusion.

(roof, wall, porch, foundation, stairway, etc.)

6. Vertical Separation is required for utilities crossing one another (not addressed here)

7. NESC - National Electric Safety Code - The separation from structures is based upon various criteria and must meet the NESC

8. Separations shown between utilities not owned and operated by GRU are for reference only

9. See Tree Separation Details W-10.9, WW-9.2 and 9.7, and RCW 9.5 for detailed tree separation information.

10. See GRU Plant Matrix Guide.

11. Minimum 15' for large trees.

12.When a potable or reclaimed water main, or a wastewater force main is routed within 10 ft. of an electric transformer, a 20 ft. length of DIP shall be centered on the transformer with mechanical restraint at each end. No fittings or valves shall occur within 10 ft. of the nearest edge of the transformer. A minimum clearance of 3' shall be maintained between the main and the transformer.