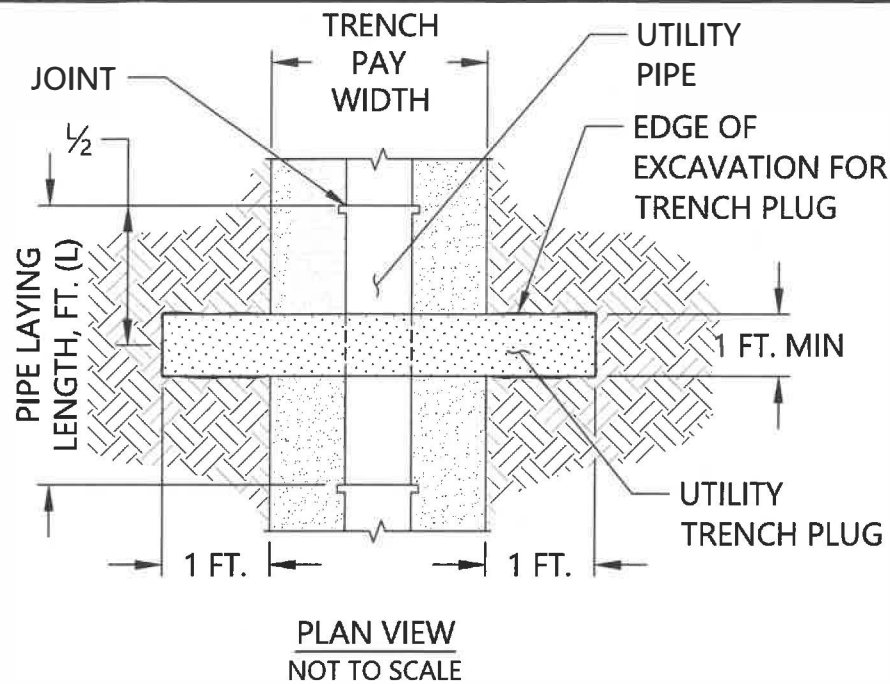
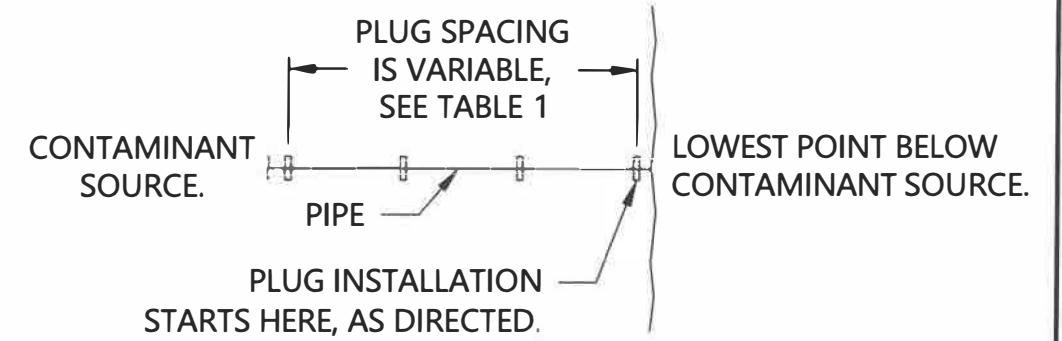


P-105 UTILITY_TRENCH_PLUG.DWG 9/20/19 11:10 AM SEROBINSON



NOTES:

1. REFER TO PLANS FOR TRENCH PLUG LOCATIONS AND TOP ELEVATIONS TO BE DETERMINED BY THE OWNER.
2. PLUG SHALL BE IMPERMEABLE AND COMPOSED OF A BENTONITE CLAY/SAND MIXTURE, OR CONTROLLED LOW STRENGTH MATERIAL (CLSM), CONSTRUCTED AS SHOWN.
3. TRENCH PLUG SHALL EXTEND BEYOND THE EXISTING UTILITY TRENCH WIDTH INTO NATIVE SOIL PER THE MINIMUM DIMENSIONS SHOWN.
4. TRENCH PLUG SHALL BE CONSTRUCTED IN AREAS OF SHALLOW GROUNDWATER AS DETERMINED BY THE OWNER ACCORDING TO TABLE 1



$$*POTENTIAL FLOW GRADIENT, \% = \frac{\left(\text{CONTAMINANT SOURCE, ELEV. (FT)} \right) - \left(\text{LOWEST POINT BELOW CONTAMINANT SOURCE, ELEV. (FT)} \right)}{\text{DISTANCE BETWEEN LOCATIONS, (FT)}}$$

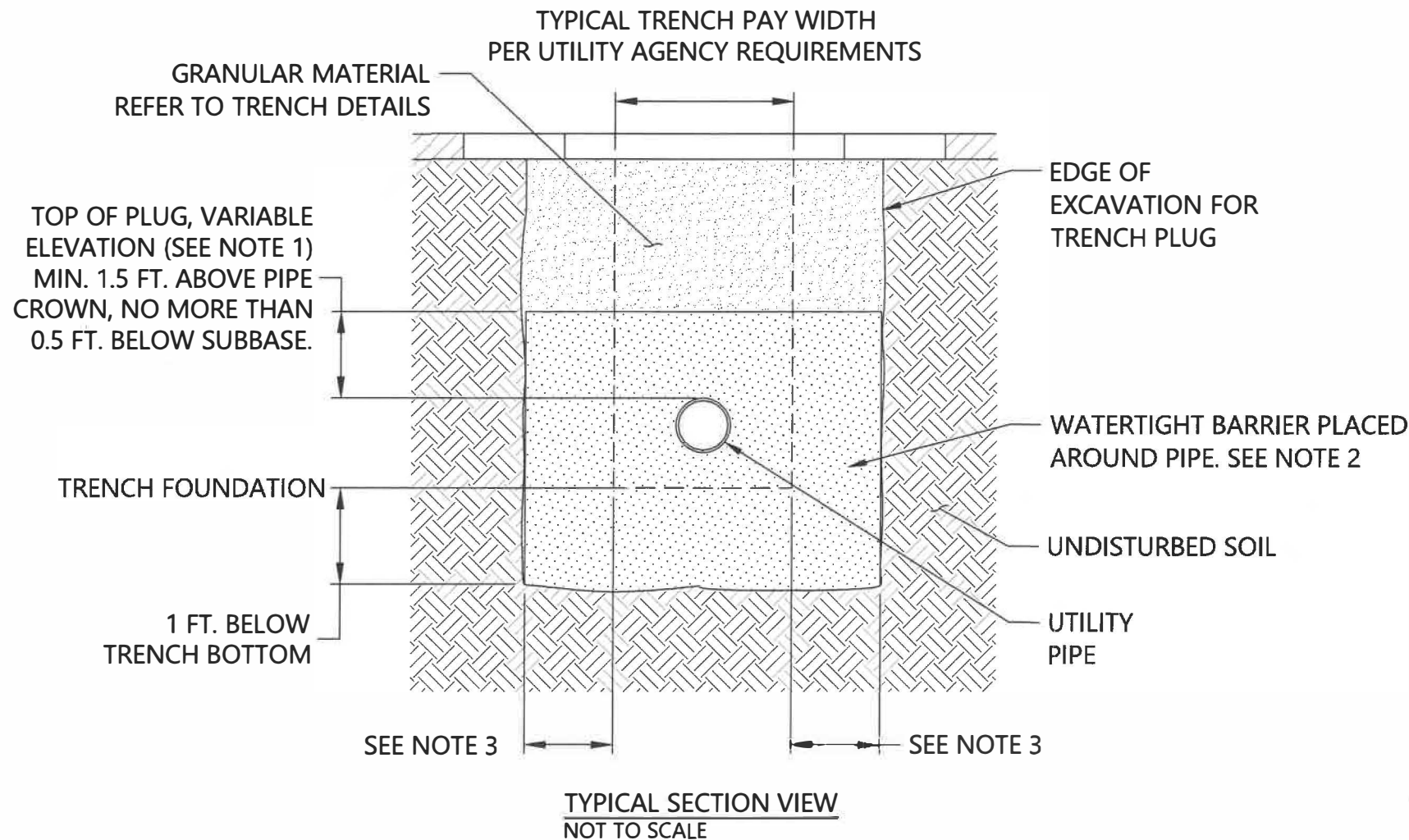


TABLE 1

*POTENTIAL FLOW GRADIENT, %	PLUG SPACING, FT.
0-5	150
5-15	100
15-30	75
>30	50

The selection and use of this Standard Detail, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user.	 Bureau of Environmental Services CITY OF PORTLAND, OREGON <i>Walter F. Ryan</i> 10/14/19 Chief Engineer	
	Standard Detail Title Utility Trench Plug	
Note: All material and workmanship shall be in accordance with the City of Portland Standard Construction Specifications.	Effective Date: Oct-17-19	Standard Detail No. P-105
	Calc. Book No.: N/A	
	Baseline Report Date: N/A	