
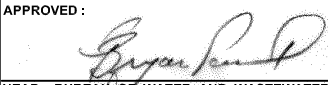



**NOTES:**

1. NO. 57 AGGREGATE MAY BE SUBSTITUTED FOR GRAVEL.
2. WHEN 2 TIER TRENCH SUPPORT IS REQUIRED, ADD 24" TO "W" FOR CALCULATING THE AMOUNT OF PAVING NEEDED FOR TRENCH REPAIR.
3. HAUNCHING AREA (A) AROUND THE PIPE SHALL BE COMPACTED TO A MINIMUM 95% PROCTOR DENSITY. TAMPING SHALL BE DONE IN 4" LAYERS TO THE SPRING LINE. COMPACTION OF THE EMBEDMENT MATERIAL SHOULD BE DONE IN A WAY THAT THE COMPACTION EQUIPMENT WILL NOT DAMAGE THE PIPE OR CAUSE DEFLECTION OF/IN THE PIPE. WHEN HYDRO-HAMMERS ARE USED TO ACHIEVE COMPACTION THEY SHOULD NOT BE USED WITHIN 3' OF THE TOP OF PIPE AND THEN ONLY IF THE EMBEDMENT MATERIAL DENSITY HAS BEEN PREVIOUSLY COMPACTED TO A MINIMUM 85% PROCTOR DENSITY.
4. ALL SUITABLE MATERIAL EXCAVATED FROM UTILITY TRENCHES SHALL BE USED AS FAR AS PRACTICABLE, FOR BACKFILL IN TRENCHES. SOILS AND SOIL AGGREGATE MIXTURES USED AS TRENCH BACKFILL SHALL CONFORM TO THE MINIMUM COMMON BORROW REQUIREMENTS IN THE CITY SPECIFICATIONS FOR MATERIALS, HIGHWAYS, BRIDGES, UTILITIES, AND INCIDENTAL STRUCTURES.

HDPE PIPE				
DIMENSIONS				
D	OD	A	B	W
12"	14.2"	4"	20.2"	30"
15"	17.7"	4"	23.7"	34"
18"	21.5"	4"	27.5"	39"
24"	28.4"	4"	34.4"	48"
30"	35.5"	6"	41.5"	56"
36"	41.4"	6"	47.4"	64"
42"	48.0"	6"	54.0"	72"
48"	54.0"	6"	60.0"	80"
54"	61.0"	6"	67.0"	88"
60"	67.3"	6"	73.3"	96"

	APPROVED :  HEAD, BUREAU OF WATER AND WASTEWATER	CITY OF BALTIMORE DEPARTMENT OF PUBLIC WORKS BUREAU OF WATER AND WASTEWATER	ISSUED	REVISED	REVISED
	 DIRECTOR, DEPARTMENT OF PUBLIC WORKS		3 / 2008		
GRAVEL CRADLE FOR HDPE STORM DRAINS			STANDARD NO. BC 302.04		
			SCALE : NONE	SHEET 1 OF 1	