RIP RAP APRON SIZING:

La = 0.5V * D

La = LENGTH OF RIP RAP APRON, FT
V = CULVERT DISCHARGE VELOCITY, FT/S
D = DIAMETER OR HEIGHT OF CULVERT, FT

* MIN. APRON LENGTH IS 6 FT
The riprap should be composed of a well-graded mixture, but most of the stone should be of the size indicated by the curve. Riprap should be placed over a filter blanket or bedding graded gravel in a layer 1.5 times (or more) as thick as the largest stone diameter.