

FIGURE SC 6.1 Sediment Basin (Adapted from VEaSCH²⁸)

TABLE S	
Outlet P	ipe Diameter (inches

Н	$D = 6.171(Q/H)^{1/2}$	$D = 1.232(QH)^{-1.5}$
1.0	Q < 24 cfs	Q > 24 cfs
1.5	Q < 75 cfs	Q > 75 cfs
2.0	Q < 135 cfs	Q > 135 cfs
2.5	Q < 250 cfs	Q > 250 cfs
3.0	Q < 400 cfs	Q > 400 cfs

NOTES

- 1. TOTAL BASIN CAPACITY SHALL BE 3,600 FT3/ACRE OF CONTRIBUTING DRAINAGE AREA. HALF OF THIS VOLUME SHALL BE IN THE FORM OF A PERMANENT POOL OR WET STORAGE. THE OTHER HALF OF THIS VOLUME SHALL BE IN THE FORM OF DRY STORAGE AVAILABLE FOR RUNOFF STORAGE.
- 2. THE BASIN SHALL BE LONG AND NARROW, WITH A LENGTH-TO-WIDTH RATIO OF 2:1 OR GREATER. APPROPRIATE BASIN SHAPE MAY BE ATTAINED BY PROPERLY SELECTING THE SITE OF THE BASIN, BY EXCAVATION, OR BY THE USE OF BAFFLES.
- 3. MAXIMUM EMBANKMENT HEIGHT SHALL BE 9 FEET. MEASURES SHOULD BE INCORPORATED IN THE EMBANKMENT TO PROTECT AGAINST FAILURE DUE TO SEEPAGE. A GEOTECHNICAL ENGINEER SHOULD BE CONSULTED FOR SPECIFIC DESIGN CONSIDERATIONS.
- 4. THE PRINCIPAL OUTLET SHALL CONSIST OF A PERFORATED VERTICAL PIPE JOINED BY A WATERTIGHT CONNECTION TO A HORIZONTAL OUTLET PIPE EXTENDING THOUGH THE EMBANKMENT AND OUTLETTING BEYOND THE DOWNSTREAM TOE OF THE FILL.
- 5. THE OUTLET PIPE SHALL BE DESIGNED TO PASS THE PEAK FLOW EXPECTED FROM A 2-YEAR STORM. THE OUTLET PIPE DIAMETER CAN BE DETERMINED USING TABLE SC6.3 BELOW. FOR THE PURPOSES OF THE TABLE, Q (CFS) IS THE FLOW FOR THE 2-YEAR STORM; H (FT) IS THE DIFFERENCE IN ELEVATION BETWEEN THE CREST OF THE PRINCIPAL OUTLET AND THE CREST OF THE EMERGENCY SPILLWAY (SEE FIGURE SC6.1); AND D (INCHES) IS THE PIPE DIAMETER.



