

$$D_{50} = 0.00594 V_a^3 / (d_{avg}^{1/2} K_1^{3/2})$$

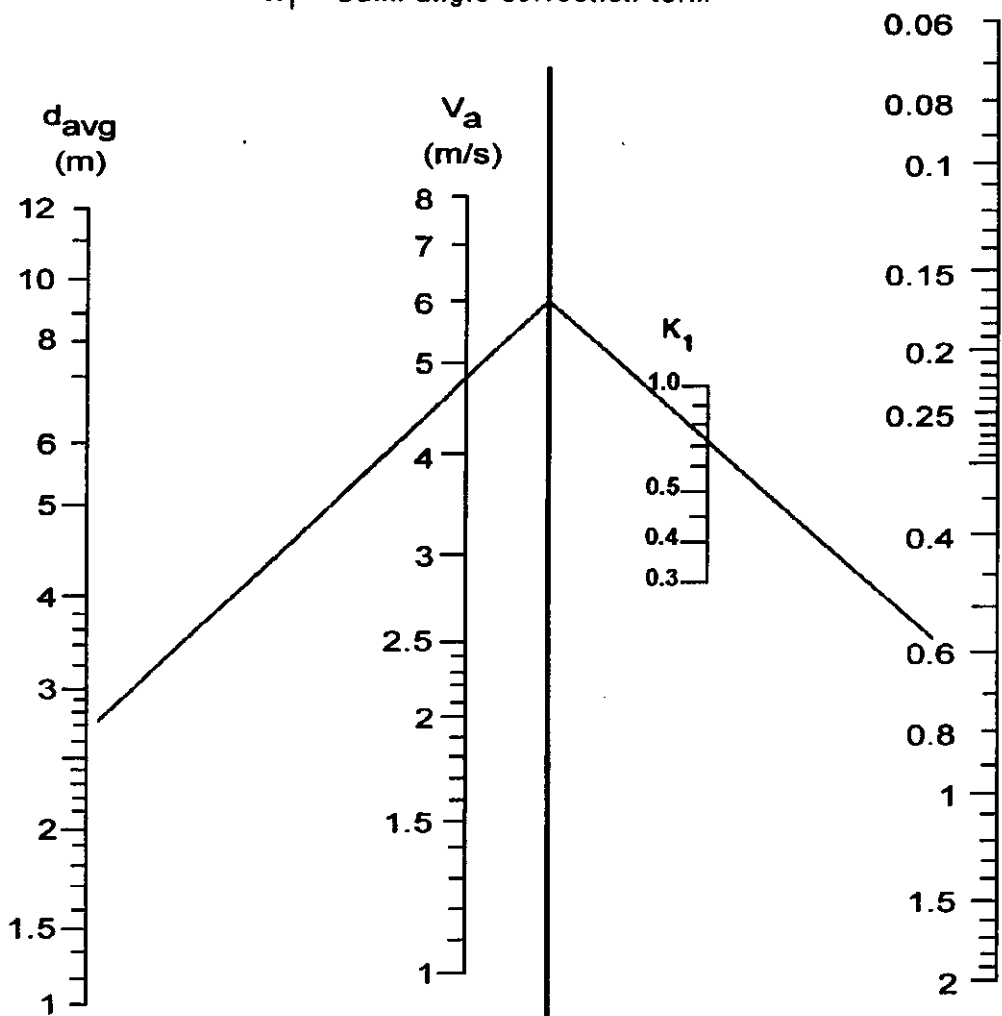
$D_{50}$  = Median Riprap Size (m)

$V_a$  = Average velocity in main channel (m/s)

$d_{avg}$  = Average depth in main channel (m)

$K_1$  = Bank angle correction term

$D_{50}$   
(m)



**Example**

**Given:**

$V_a = 4.9$  m/s

$d_{avg} = 2.75$  m

$K_1 = 0.72$

**Find:**

$D_{50}$

**Solution:**

$D_{50} = 0.69$  m

**RIPRAP SIZE RELATIONSHIP**

**Figure 38-6A**