

**Table 5. Riser pipe outlet design for settling basins.**

Open slot area per foot of pipe height, in <sup>2</sup> /ft	Head, ft							
	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0
	cfs							
4	0.034	0.093	0.169	0.259	0.361	0.473	0.596	0.728
6	0.051	0.139	0.253	0.388	0.541	0.710	0.894	1.091
8	0.068	0.186	0.338	0.518	0.721	0.947	1.192	1.455
10	0.085	0.232	0.422	0.647	0.902	1.183	1.480	1.819
12	0.102	0.279	0.507	0.776	1.082	1.420	1.788	2.183
14	0.119	0.325	0.591	0.906	1.262	1.657	2.086	2.546
16	0.136	0.371	0.675	1.035	1.443	1.894	2.384	2.910
18	0.153	0.418	0.760	1.164	1.623	2.130	2.682	3.274
20	0.170	0.464	0.844	1.294	1.803	2.367	3.890	3.638
22	0.187	0.511	0.929	1.423	1.984	2.604	3.277	4.001
24	0.204	0.557	1.013	1.542	2.164	2.840	3.575	4.365
26	0.221	0.603	1.097	1.682	2.344	3.077	3.873	4.729
28	0.238	0.650	1.182	1.811	2.525	3.314	4.171	5.093
30	0.255	0.696	1.266	1.940	2.705	3.550	4.469	5.456
32	0.272	0.743	1.351	2.070	2.885	3.787	4.767	5.820
34	0.289	0.789	1.435	2.199	3.066	4.024	5.065	6.184
36	0.306	0.836	1.519	2.329	3.246	4.260	5.363	6.548
38	0.323	0.882	1.604	2.458	3.426	4.497	5.661	6.911
40	0.340	0.928	1.688	2.587	3.607	4.734	5.959	7.275

**Source:** MWPS-18.

**Note:** Based on:  $Q = (C)(A)(2gh)^{0.5}$ , where Q = flow rate in cfs; C = slot constant, assumed to be 0.61; A = open slot area in ft<sup>2</sup>; g = 32.174 ft/sec<sup>2</sup>; h = head on openings in feet. The pipe height is divided into 0.5-foot increments. The head on all the slots in the first 0.5-foot increment is assumed to be 0.25 foot. The head on subsequent 0.5-foot increments increases at 0.5-foot increments.