



**American Water Works
Association**

Errata to

**AWWA Manual M11,
Steel Pipe—A Guide for Design and Installation
Fifth Edition
(April 2018)**

Chapter 5

1. Page 67, Eq 5-9 should read:

(Eq 5-9)

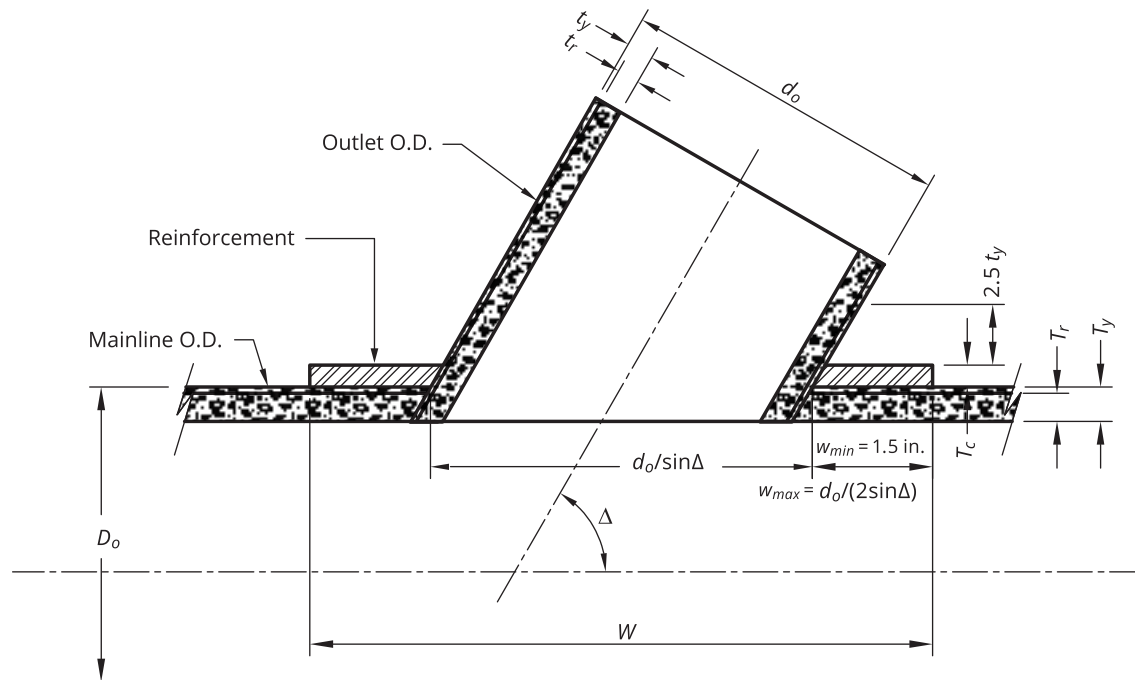
$$q_a \geq \frac{\gamma_w}{1,728} H_w + R_w \frac{W_c}{12D_o} + \frac{W_L}{144}$$

2. Page 68, line 24 just above REFERENCES "Check live load condition" should read:

$$q_a \geq (62.4/1728) \times (15 \times 12) + 0.80 [12,438 / (12 \times 49.75)] + 0/144"$$

Chapter 7

- Page 95, revise W_{min} and W_{max} to w_{min} and w_{max} as shown in Figure 7-5 below:



D_o = mainline pipe outside diameter, in.

T_y = mainline cylinder thickness, in.

T_r = required mainline cylinder thickness, in.

d_o = outlet pipe outside diameter, in.

t_y = outlet cylinder thickness, in.

t_r = required outlet cylinder thickness, in.

Δ = outlet deflection angle, degrees

T_c = collar or wrapper thickness, in.

W = overall collar or wrapper width, in.

w = collar or wrapper edge width, in.

Note: Figure does not show the location of necessary welds. See Figures 7-7 and 7-8 for weld definition.

Figure 7-5 Generic sectional view of reinforcement of outlets in welded steel pipe

- Page 109, the first equation should read:

$$A_a = \frac{(61.750 - 2(0.290))}{\sin 90^\circ} (0.290 - 0.147) + 5 (0.290) (0.290 - 0.147) 1.0 = 8.95 \text{ in.}^2$$

- Pages 128-135, Table 7-3 footnote * at the bottom, line 3, revise < 20 in. to > 20 in. and revise < 36 in. to > 36 in. as follows:

*Pipe diameters noted are nominal unless specifically noted as "OD". For nominal diameters, the outside diameter used in the calculation of the lug assembly is equal to the following: the nominal diameter plus 1 in. for pipe sizes ≤ 20 in.; the nominal diameter plus 1.5 in. for sizes > 20 in., but ≤ 36 in.; the nominal diameter plus 2 in. for sizes > 36 in., but ≤ 96 in.; and the nominal diameter plus 2.5 in. for sizes > 96 in. The minimum cylinder thickness is based on the larger of the following: 0.135 in.; $D/288$, and the calculated thickness based on a pressure equal to (design pressure)/1.5 and an allowable stress of 17.5 ksi and 18 ksi for diameters ≤ 30 in. OD and > 30 in. OD, respectively.