

Appendix 9B-3 LD-347 Hydraulic Grade Line Computations

LD-347 Rev. 3/07
HYDRAULIC GRADE LINE

PROJECT: _____
SHEET: _____ of _____

INLET NUMBER (1)	Outlet Water Surface Elev. (2)	D _o (3)	Q _o (4)	L _o (5)	S _{f_o} % (6)	H _f (7)	JUNCTION LOSS												Final H (19)	Inlet Water Surface Elev. (20)	Rim Elev. (21)		
							V _o (8)	H _o (9)	Q _i (10)	V _i (11)	Q _i V _i (12)	$\frac{V_i^2}{2g}$ (13)	H _i (14)	Angle (15)	H _Δ (16)	H _t (17)	1.3 H _t (18)	0.5 H _t (19)					

See LD-72 (D)67

FINAL H = H_f + H_t
H_t = H_o + H_i + H_Δ

90° K = 0.70	50° K = 0.50	20° K = 0.25
80° K = 0.66	40° K = 0.43	15° K = 0.19
70° K = 0.61	30° K = 0.35	10° K = 0.13
60° K = 0.56	25° K = 0.30	5° K = 0.06

$H_i = 0.35 \frac{V_i^2}{2g}$ $H_o = 0.25 \frac{V_o^2}{2g}$ $H_{\Delta} = K \frac{V_i^2}{2g}$