

FHWA CULVERT ANALYSIS, HY-8, VERSION 6.0

CURRENT DATE	CURRENT TIME	FILE NAME	FILE DATE
06-02-2003	15:23:59	ENERGY3	06-02-2003

CULVERT AND CHANNEL DATA

CULVERT NO. 1	DOWNSTREAM CHANNEL
CULVERT TYPE: 8.00 ft x 6.00 ft BOX	CHANNEL TYPE: IRREGULAR
CULVERT LENGTH = 305.0 ft	BOTTOM WIDTH = 8.00 ft
NO. OF BARRELS = 1.0	TAILWATER DEPTH = 2.840 ft
FLOW PER BARREL = 800 ft ³ /s	TOTAL DESIGN FLOW = 800 ft ³ /s
INVERT ELEVATION = 175.26 ft	BOTTOM ELEVATION = 175.27 ft
OUTLET VELOCITY = 25.82 ft/s	NORMAL VELOCITY = 32.15 ft/s
OUTLET DEPTH = 4.06 ft	

RIPRAP STILLING BASIN -- FINAL DESIGN

THE LENGTH OF THE BASIN	= 97.840 ft
THE LENGTH OF THE POOL	= 65.227 ft
THE LENGTH OF THE APRON	= 32.613 ft
THE WIDTH OF THE BASIN AT THE OUTLET	= 8.000 ft
THE DEPTH OF POOL BELOW CULVERT INVERT	= 6.523 ft
THE THICKNESS OF THE RIPRAP ON THE APRON	= 6.667 ft
THE THICKNESS OF THE RIPRAP ON THE REST OF THE BASIN	= 5.000ft
THE BASIN OUTLET VELOCITY	= 17.487 ft/s
THE DEPTH OF FLOW AT BASIN OUTLET	= 6.000 ft

RIPRAP STILLING BASIN HY-8 PROGRAM OUTPUT

Figure 34-8G