

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: 2400 mm x 1830 mm BOX	CHANNEL TYPE: IRREGULAR
CULVERT LENGTH = 91.453 m	BOTTOM WIDTH = 2.400
NO. OF BARRELS = 1.0	TAILWATER DEPTH = 0.851 m
FLOW PER BARREL = 22.653 m ³ /s	TOTAL DESIGN FLOW = 22.653 m ³ /s
INVERT ELEVATION = 52.578 m	BOTTOM ELEVATION = 52.581 m
OUTLET VELOCITY = 7.745 m/s	NORMAL VELOCITY = 9.644 m/s
OUTLET DEPTH = 1.219 m	

RIPRAP STILLING BASIN -- FINAL DESIGN

THE LENGTH OF THE BASIN	= 29.352 m
THE LENGTH OF THE POOL	= 19.568 m
THE LENGTH OF THE APRON	= 9.784 m
THE WIDTH OF THE BASIN AT THE OUTLET	= 2.400 m
THE DEPTH OF POOL BELOW CULVERT INVERT	= 1.957 m
THE THICKNESS OF THE RIPRAP ON THE APRON	= 2.000 m
THE THICKNESS OF THE RIPRAP ON THE REST OF THE BASIN	= 1.500 m
THE BASIN OUTLET VELOCITY	= 5.246 m/s
THE DEPTH OF FLOW AT BASIN OUTLET	= 1.799 m

RIPRAP STILLING BASIN HY-8 PROGRAM OUTPUT

Figure 34-8G