

ROUTE: _____ DES. NO.: _____ PROJECT NO.: _____

DESCRIPTION: _____

Prepared By: _____ Date: _____ Checked By: _____ Date: _____

Definition Sketch

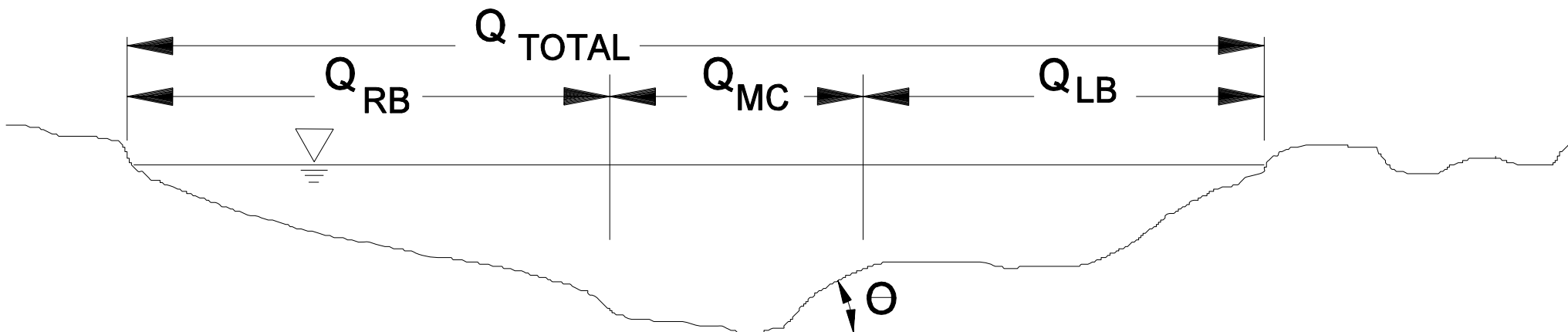
Q_{TOTAL} _____ Soil Characteristics:
 Q_{MC} _____ D_{15} _____
 Q_{LB} _____ D_{50} _____
 Q_{RB} _____ D_{85} _____

DEPTH OR W.S. (m) (1)	A (m ²) (2)	V _g (m/s) (3)	d _a (m) (4)	θ (5)	Φ (6)	K ₁ (7)	D ₅₀ (mm) (8)	SF (9)	S _s (10)	C (11)	C _{P/A} (12)	D ₅₀ (mm) (13)	NOTES

Design Sketch	RIPRAP CHARACTERISTICS:		FABRIC CHARACTERISTICS:	
	Size: _____	Thickness: _____	Granular: _____	Size: _____
	D ₅₀ _____	2D ₅₀ _____		Percent
	Class _____	D ₁₀₀ _____		Finer
AASHTO _____	Use _____		100	
Gradation: _____	Size: _____	Percent	50	
	(mm)	Finer	5-10	
	_____	100		
	_____	50		
	_____	5-10		
			Fabric: AOS < _____ mm	
			Perm. > _____ mm	

- | | | | |
|-----------------------------------|---|---|--|
| (1) Water surface elevation | (5) Bank angle | (8) Riprap size (Fig. 38-6A) | (12) Pier/abutment correction (3.38 if applicable) |
| (2) Main channel flow area | (6) Riprap angle of repose (Fig. 38-6C) | (9) Stability factor | (13) Correction $D_{50} = (8) \times (11) \times (12)$ |
| (3) Main channel average velocity | (7) Bank angle correction (Fig. 38-6B) | (10) Riprap specific gravity | |
| (4) Main channel average depth | | (11) Riprap size correction factor (Fig. 38-6E) | |

RIPRAP SIZE PARTICLE EROSION



DEFINITION SKETCH FOR RIPRAP SIZE PARTICLE EROSION