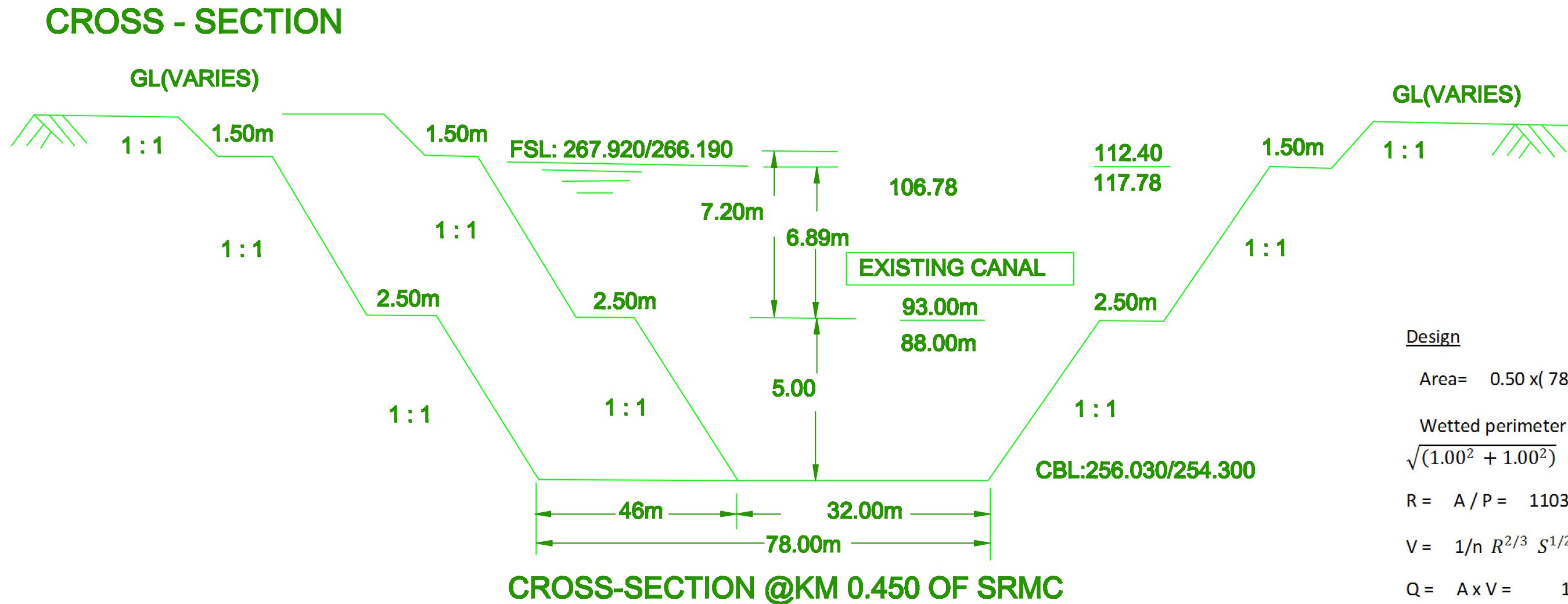


**IMPROVEMENTS TO SRISAILAM RIGHT MAIN CANAL (UNLINED)**  
**HYDRAULIC PARTICULARS**

Bed Width	: 78.00 m
First Berm Width @ 5.00m From Bed level	: 2.50 m
Second Berm Width @ 12.20m From Bed level : 1.50 m	: 1.50 m
Side slopes in Soils	: 1 : 1
Side slopes in Nandyal Shale	: 1 : 1
Full Supply Depth	: 11.89 m
Bed Fall	: 1 in 12000
Value of “ n ”	: 0.035 (Unlined)
Velocity	: 1.167 m/sec
Discharge required	: 1246cumecs (44000 cusecs)
Discharge Designed	: 1287cumecs (45450 cusecs)
Bed Level	: +840'-0" (+256.030)
F.S.L	: +879'-0" (+267.920)

The Hydraulic particulars of Srisailam Right Main Canal (Unlined) are proposed as follows.

(1) Discharge	: 1246 cumecs/44,000 cusecs.
(2) Bed Width	: 78.00mt.
(3) F S depth	: 11.89mt.
(4) Side slopes	: 1:1
(5) Surface fall	: 1 in 12,000
(6) Value of “ n ”	: 0.035 (Unlined)
(7) Width of berm	
at 5m height from canal bed	: 2.50 mt.
at 12.2m height from canal bed	: 1.50mt.
at 20.2m height from canal bed	: 1.50mt (in deep cut reaches)



Design

$$\text{Area} = 0.50 \times (78.00 + 88.00) \times 5.00 + 0.50 \times (93.00 + 108.78) \times 6.89 = 1103.24$$

$$\text{Wetted perimeter} = 78.00 + 2 \times 5.00 \times \sqrt{(1.00^2 + 1.00^2)} + 2 \times 2.50 + 2 \times 6.89 \times \sqrt{(1.00^2 + 1.00^2)} = 116.63$$

$$R = A / P = 1103.24 / 116.63 = 9.459$$

$$V = \frac{1}{n} R^{2/3} S^{1/2} = \frac{1}{0.035} \times 9.459^{2/3} \times \sqrt{\frac{1}{12000}} = 1.167$$

$$Q = A \times V = 1103.24 \times 1.167 = 1287.02 \quad (\text{or}) \quad 45450$$