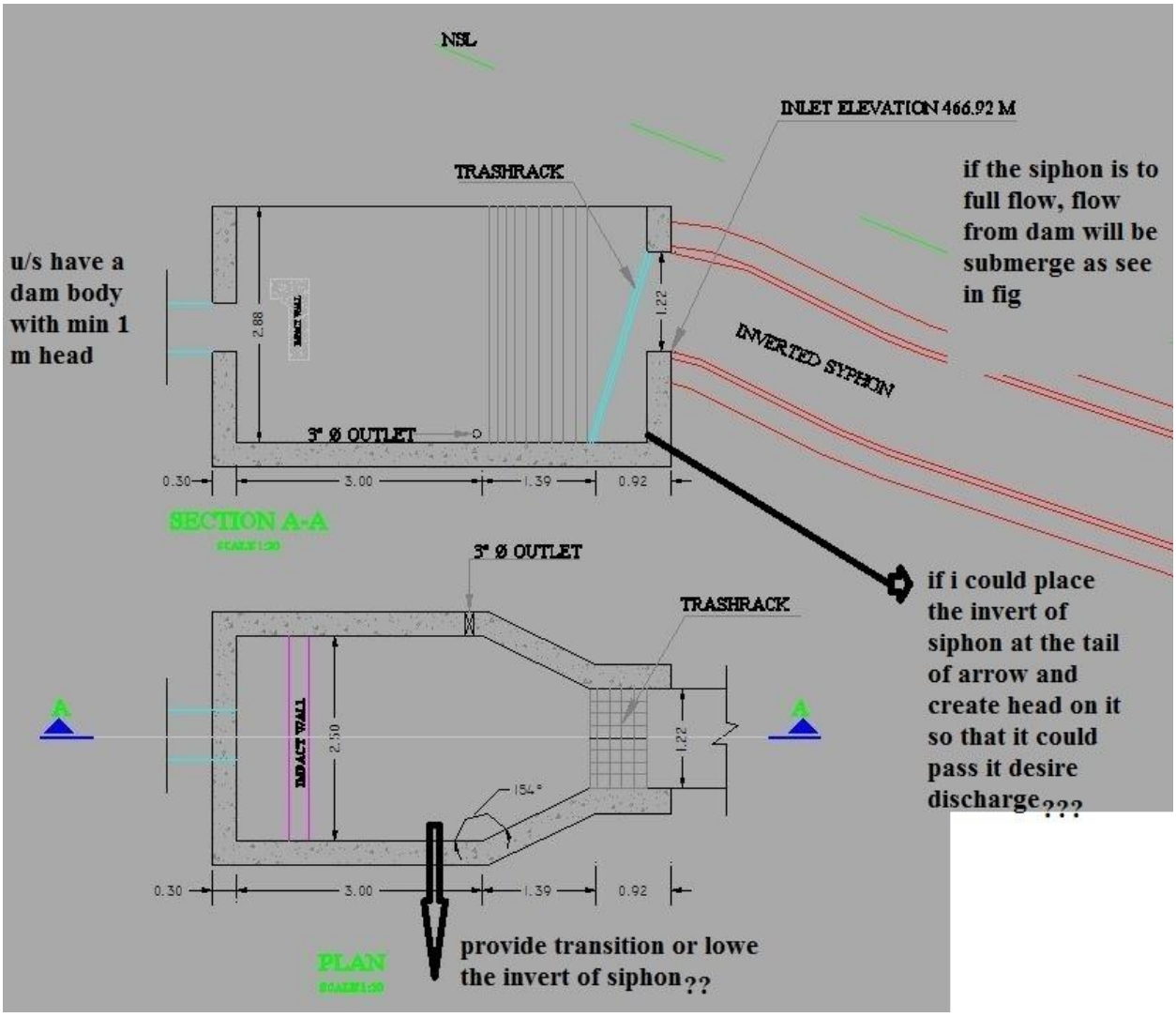
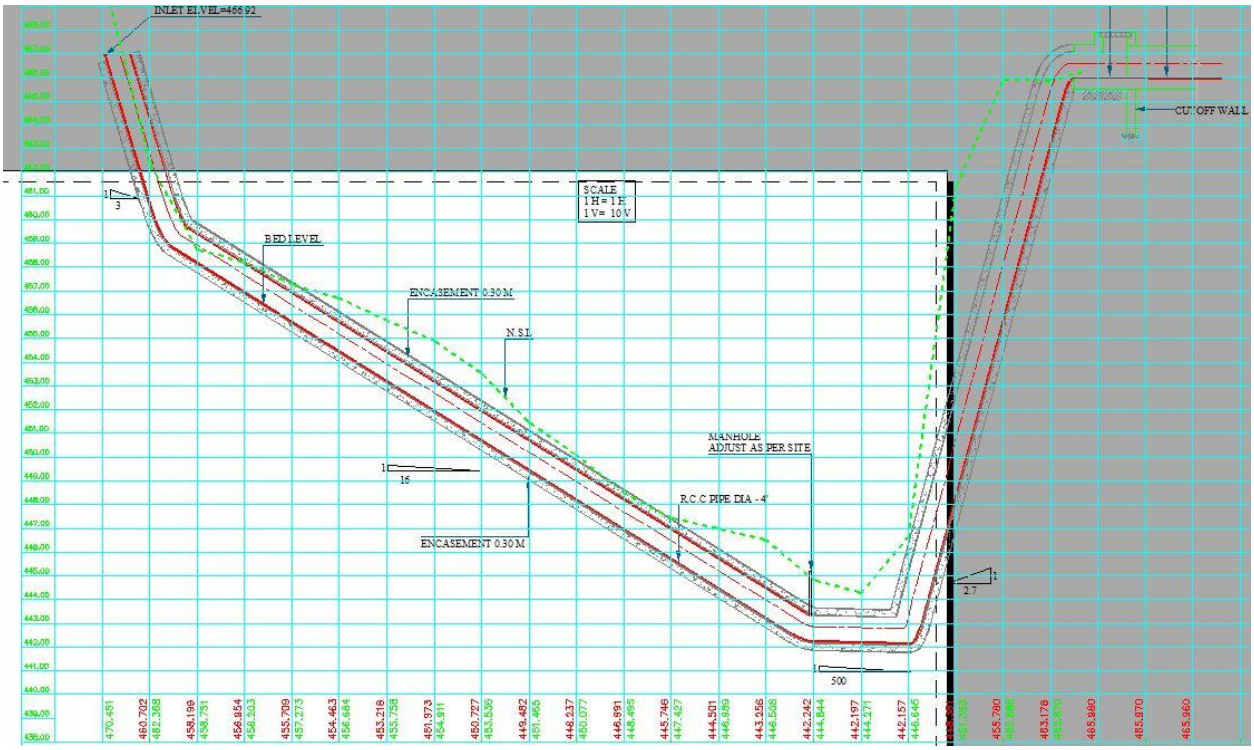
Inlet configuration



Profile with horizontal 1:1 scale and vertical 1: 10 scale



Design calculations

		Input Data			Design Calculations 1		
Head loss in siphon	Q	Discharge in siphon	54	cusec	area of pipe	12.56	ft^2
	d_1	depth in open channel	2.5	ft	velocity in pipe	4.30	ft/sec
	v_1	velocity in open channel	2.5	ft/sec	perimeter	12.56	ft
	D	Dia of siphon	4	ft	hydraulic radius	1	ft
	L	length of siphon	1396.68	ft	head in open channel	0.10	ft
	n	manning	0.013		head in pipe	0.29	ft
		add 20 % to manning	0.016		frictional loss	2.86	ft
	F_b	normal free baord	1	ft	ent loss	0.09	ft
		add. Freeboard*	1.5	ft	exit loss	0.13	ft
	h_{en}	enter loss coefficient loss	0.5		bend loss	0.05	ft
		no. of trash racks	1		trash rack loss	0.01	ft
	h_{ex}	exit loss coefficient	0.7		total	3.13	ft
		bend loss coefficient	0.04		10% in addtion	0.31	ft
		no. of bends	4		total	3.44	ft
	U/S F.S.L	m	466.92		LOSS IN METER	1.05	
	D/S F.S.L	m	465.87				