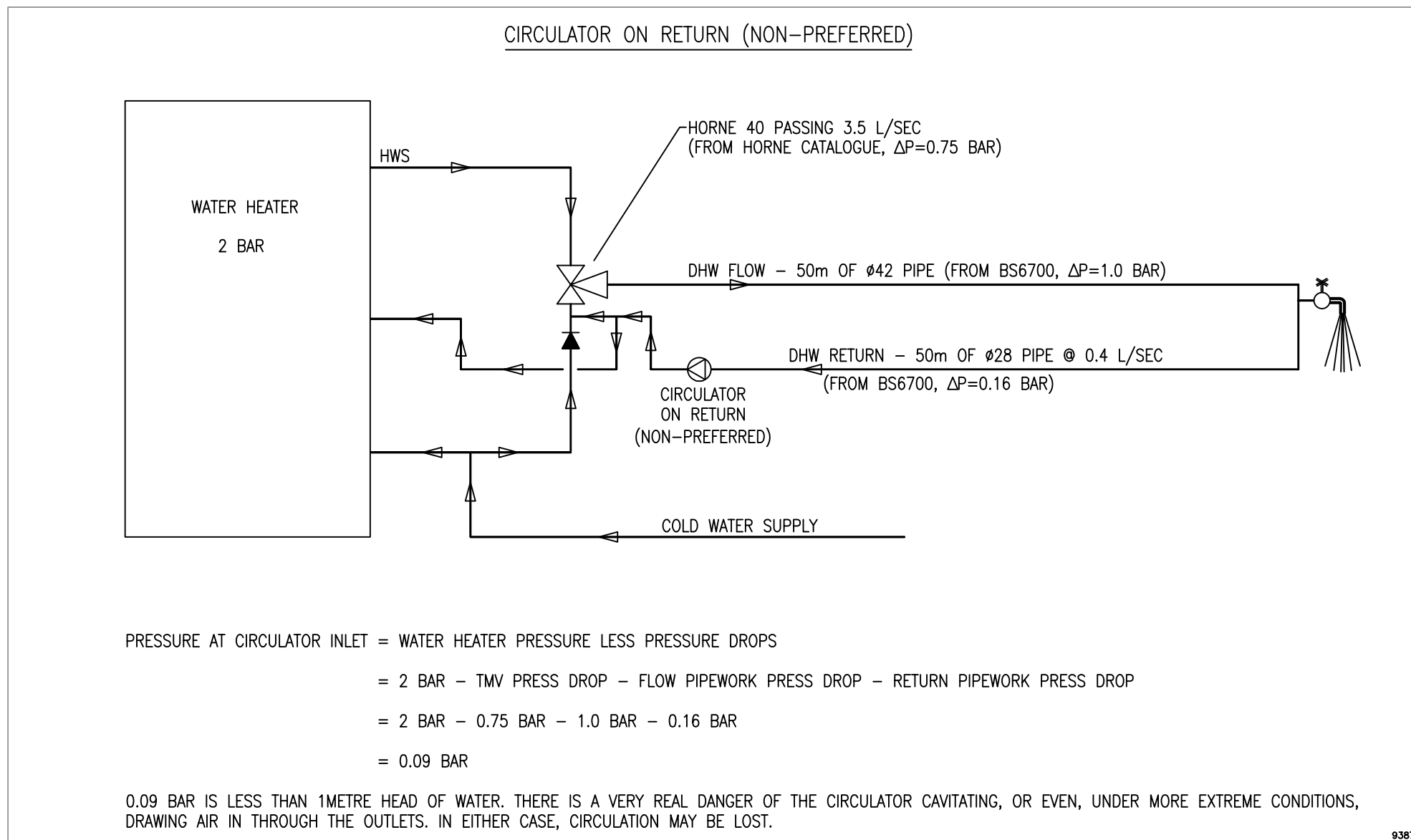
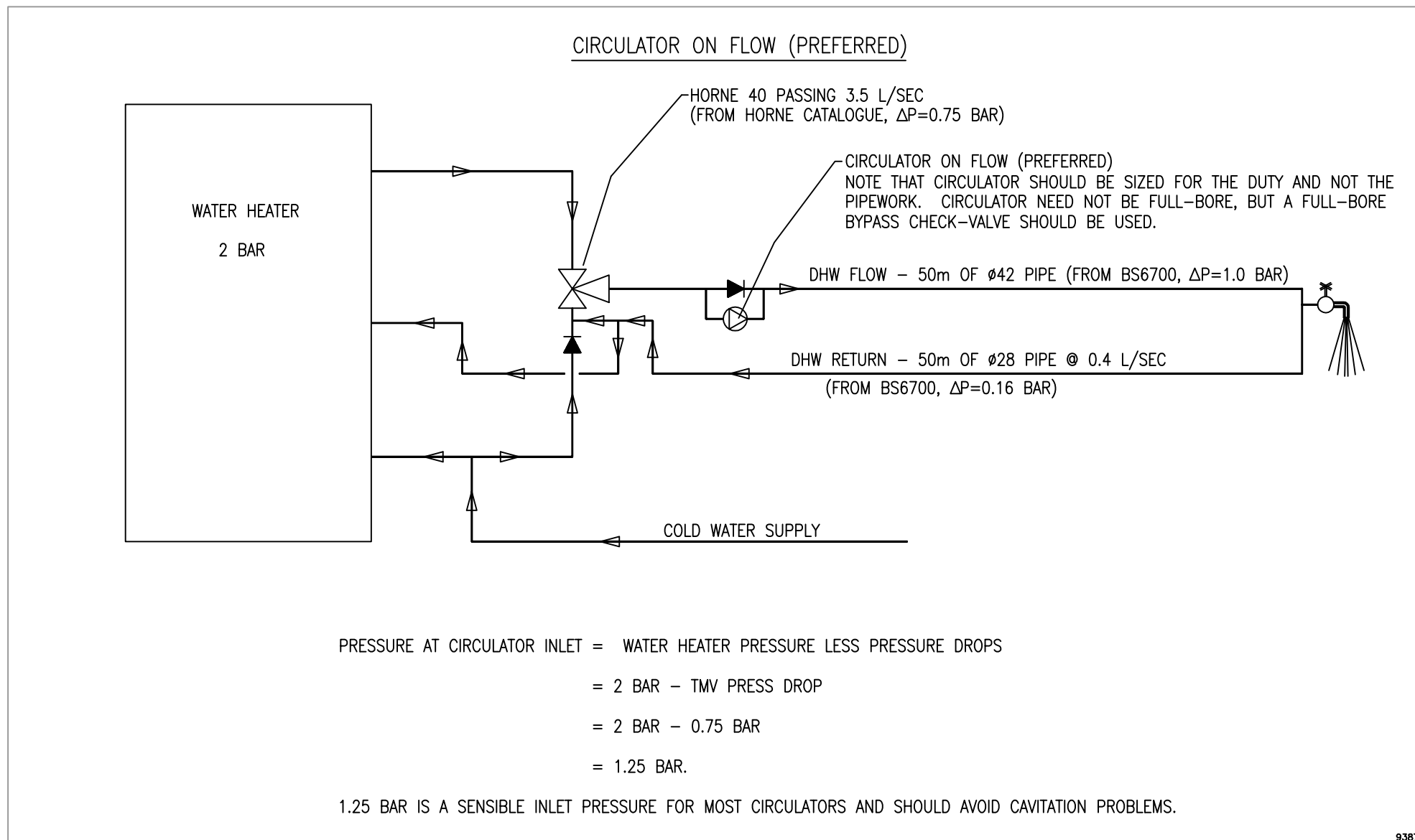


# COMPARISON OF CIRCULATOR LOCATION – FLOW VERSUS RETURN PIPEWORK

CONSIDER A CIRCUIT COMPRISING A WATER HEATER FEEDING A HORNE 40 TMV WITH 50 METRES OF  $\phi 42$ mm FLOW PIPEWORK, FEEDING 3.5 L/SEC TO OUTLETS. THIS IS A CIRCULATING SYSTEM, WITH 50 METRES OF  $\phi 28$ mm RETURN PIPEWORK AND A CIRCULATOR CREATING A CIRCULATION FLOWRATE OF 0.4 L/SEC. THE PROBLEM IS THE WATER PRESSURE AVAILABLE AT THE CIRCULATOR INLET – IF THIS IS INSUFFICIENT THEN THE PUMP MAY CAVITATE OR DRAW AIR.



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PART : CIRCULATOR LOCATION FLOW Vs RETURN	PRODUCT : HORNE 40/50 RECIRCULATING VERSIONS	MATERIAL : —		HORNE ENGINEERING LTD. JOHNSTONE RENFREWSHIRE  DR'G. No. 9387
		SCALE	N/A	
		DRAWN	GDP 7/11/06	
		CHECKED		
		ISSUE	2	