Flow = 7.5 GPM **Delta Z =** 231 ft

Material: Galvanized CS, Sched 40 Above Ground, 1.5" HDPE Below Ground
DIA 1.5 inch
Area 0.0141377 ft^2
Velocity = 1.18 fps

		Unit Le	Qty	Le
Pipe		1	50	50
Elbow	90 deg LR	4.03	10	40.3
	45 deg SR	2.15	0	0
Weld	r/d = 1	0		0
Weld	r/d = 2	0		0
Miter	45 deg	0		0
Miter	90 deg	0		0
Tee	Thru	2.68	4	10.72
	Branch	8.05	2	16.1
Bend	Close Return	6.71		0
Valve	Gate	1.07	3	3.21
	Swing Check	13.4	1	13.4
	Angle	20.1		0
	Globe	45.6		0
	Butterfly	0		0
	Total			**134**

HDPE Pipe
SDR 9.0
Head Loss 4.74 PSI
11 ft

from CHD: **f =** 0.51 ft/cft

hf = 0.7 ft

P1/rho = -10 ft
P2/rho = 0 ft
v1/2gc = 0 ft
v2/2gc = 0 ft
hE = 0 ft

hA = (P1-P2/rho) + (v2^2 - v1^1)/2gc + (z2-z1) + hE + hf
hA = 241.7 ft + 11 ft = 252.6 ft
SF 1.15

TDH = 291 ft

Eff = 0.65 <---------- **ASSUMED 65% EFFICIENCY**
BHP = 0.85 HP = 631 Watts