

**CALCULATION OF REQUIRED WET WELL STORAGE**

AVERAGE DAILY FLOW GPD = STORAGE	3000
STORAGE REQUIRED IN CUBIC FEET	401.07
INSIDE WIDTH OF TANK IN FEET	5.2
INSIDE LENGTH OF TANK IN FEET	10.0
INSIDE HEIGHT OF TANK IN FEET	4.1
STORAGE AVAILABLE/FT IN CUBIC FT.	52
HEIGHT OF REQUIRED STORAGE	7.71
ELEVATION OF ALARM ON	512.02
ELEVATION OF INVERT IN	514.00
HEIGHT OF STORAGE PROVIDED ABOVE ALARM ELEV.	1.98
DOSE VOLUME PROVIDED - GALLONS	217
VOLUME OF DISTRIBUTION SYSTEM - GAL.	0

**CALCULATION OF REQUIRED DOSING VOLUME**

FORCE MAIN DIAMETER (INCHES)	2
AREA OF PIPE (SQ. FT.)	0.022
LENGTH OF FORCE MAIN TO D. BOX IN FEET	504
VOLUME OF FORCE MAIN IN CUBIC FT.	11.0
LENGTH OF DISTRIBUTION PIPES - 4" DIA.	0
AREA OF DISTRIBUTION PIPE (FT.SQ.)	0.087
VOLUME OF DISTRIBUTION PIPE IN CUBIC FT.	0.00
VOLUME FOR 100% DOSE - CUBIC FT. (includes force main volume)	40.00
VOLUME PER FOOT OF HEIGHT	52
INVERT IN TO CLEARWELL	514.00
ELEVATION OF PUMP	510.17
ELEVATION OF PUMP OFF	510.92
REQUIRED ELEVATION OF PUMP ON	511.69
ALARM ON ELEVATION	512.02
BOTTOM OF TANK - INSIDE	509.92

**PUMP STATION CALCULATIONS**

FORCE MAIN DIAMETER (INCHES)	2
FORCE MAIN LENGTH (FEET)	504
HAZEN WILLIAMS C/h (130)	130
A.D. FLOW IN GPD	3000
PEAK FLOW (10 X ADF) IN GPD	30000
PEAK FLOW IN GPM	20.83
PUMPING RATE IN GPM	44.00
PUMPING RATE IN CFS	0.098
VELOCITY (FT/SEC)	4.494
HEAD LOSS FRICTION (FEET)	24.31
ELEVATION OF PUMP	510.17
ELEVATION OF DISCHARGE POINT / HIGH POINT	554.00
ELEVATION HEAD (FEET)	43.83
STATION LOSSES (FT)	0.50
TOTAL DYNAMIC HEAD (FEET)	68.95
ESTIMATED PUMP EFFICIENCY %	60.00
REQUIRED HORSEPOWER	1.28