WTPsizer

average daily flow =	75700	m3//day	20.00	mgd	13888.89	U.S. GPM	
water temperature =	15	°C	59	°F	Abs. Viscosity =	0.2487	*10^-4 lb s/sq.ft.

recommended G for flash/rapid mixing (s^-1)

rapid mix detention	30	s	650	W =	10.5	HPw =	**17.73 HP**
tank data							**(flash mix)**
water depth =			8	feet	**2.44**	**m**	
L			10.77	feet	**3.28**	**m**	
W			10.77	feet	**3.28**	**m**	

flocculator cells	32	minutes total					

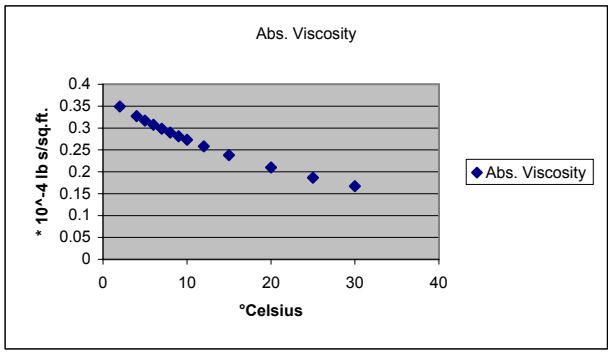
recommended G for multi-stage flocculation, e.g. 3-stage

			50	W =	0.06	HPw =	**2.24 HP stage I**
			35	W =	0.03	HPw =	**1.10 HP stage II**
			20	W =	0.01	HPw =	**0.36 HP stage III**
water depth =			12	feet	3.66	m	
individual cell data, each of three:							
L			40.62	feet	**12.38**	**m**	
W			40.62	feet	**12.38**	**m**	

conventional settling basin/sedimentation	500	gpd/sq.ft			Hammer.250		(500-800 gpd/sq.ft range)
required plan area	40000	sq.ft.	3717.5	m2			
diameter	225.7	feet	**68.80**	**m**		***76397***	*lb-ft torque*
minimum depth for	4	h detention	3.39	m	11.1	feet	

tube settler alternative	2	gpm/sq.ft.	2880	gpd/sq.ft
required plan area	6944.4	sq.ft.	645.4	m2
rough media volume	13888.9	cu.ft.	**393.3**	**m3**

conventional sand filter basin operating at	2.0	gpm/sq.ft.	2880	gpd/sq.ft.
required plan area	6944.4	sq.ft.	645.4	m2

dual and mixed-media/rapid alternate at	5.0	gpm/sq.ft.	7200	gpd/sq.ft.
required plan area	2777.8	sq.ft.	258.2	m2

°C	μ
2	0.3493 *10^-4 lb s/sq.ft.
4	0.3273 *10^-4 lb s/sq.ft.
5	0.3171 *10^-4 lb s/sq.ft.
6	0.3075 *10^-4 lb s/sq.ft.
7	0.2983 *10^-4 lb s/sq.ft.
8	0.2894 *10^-4 lb s/sq.ft.
9	0.2811 *10^-4 lb s/sq.ft.
10	0.273 *10^-4 lb s/sq.ft.
12	0.2581 *10^-4 lb s/sq.ft.
15	0.2381 *10^-4 lb s/sq.ft.
20	0.2098 *10^-4 lb s/sq.ft.
25	0.1866 *10^-4 lb s/sq.ft.
30	0.1672 *10^-4 lb s/sq.ft.