Plant Design Data

Flow:

Average Dry Weather	11,360 m^3/d
Maximum Dry Weather	17,050 m^3/d
Maximum Wet Weather	28,640 m^3/d
Peak Instantaneous	43,320 m^3/d

Headworks:

Inlet Sewer	1050 mm Concrete
Flow:	
Average	11,360 m^3/d
Maximum	28,640 m^3/d
Screening:	1 - Automatic
	2 - Manual
Width	1 m
Depth	2 m
Bar Spacing	20 mm
Lift Pumps:	3 - Dry Pit Submersible
Capacity	Each 14,560 m^3/day
	Total 43,560 m^3/day
Grit Removal Type:	Aerated
Tanks	2
Length	6.1 m
Width	3.1 m
Depth	3.1 m
Volume	117 m^3
Detention Time:	
Average Flow	15 min.
Maximum Flow	6 min.
Removal	Screw Collectors, Pumps, Classifiers

Parameters: (average)

Raw Sewage BOD	200 mg/L 2,272 kg/day
Raw Sewage SS	210 mg/L 2,386 kg/day
Plant Effluent BOD & SS	20 mg/L
Efficiency	90 % Removal

Primary Section:

Tanks:	2 - Rectangular
Length	19 m
Width	30 m
Depth	3.7 m
Volume	2,045 m^3
Surface Area	560 m^2
Detention Area:	
Average Flow	4 hours
Maximum Flow	2 hours
Collection	Plastic chain and flight
Pumps	2 Lobe Variable Speed
Capacity	3.8 L/s
Scum	Manual U-Trough

Secondary Section:

Detention Time:	
Average Flow	3 Hours
Maximum Flow	2 Hours
Aeration	Course bubble
Blowers	4 - Centrifugal Centre Feed
Final Clarifiers:	
Type	3
Diameter	15.24 m
Depth	3.66 m
Surface Area	182 m^2 each
Volume	667 m^3 each
Detention Time:	
Average Flow	4.2 hours
Maximum flow	2.8 hours
Return Sludge Pumps:	3
Type	Variable Speed
Capacity	11,360 m^3/day

Digestion:

Type	2 circular Fixed Roof
Diameter	15.24 m
Depth	7 m
Volume	1,280 each
Gas use	Mixing and Hot Water Boilers
Detention Time	17 Days
Flow	75 m^3/d
Sludge Storage	6 lagoons
Sludge Thickening	Gravity & Freeze Thaw
Sludge utilization	Agricultural Land Application