

STP LOAD CLACULATIONS

INNAMAADHOO SEWERAGE

item no.	Description	Unit	Qty
	CIVIL WORKS		
1	STP Capacity (30years design Horizon)	m3/day	216.6
2	15 years design horizon capacity	m3/day	173.28
3	Civil construction works (for 30 years)		
3.1	Grit Channel		
	216.6/24/60	m3/min	0.15
3.2	O/G Seperator (30 min retention)		
	(216.6/24) x 0.5	m3	2.73 x 2
3.3	Equalization tank (1 hr retention)		
	262.2/24	m3	4.51 X 2
3.4	Areation Tank (18hr holding cap)	m3	81.22 x 2
3.5	Clarifier tank (4 hrs of AWWF)	m3	18.05 X 2
3.6	Clear Water tank (No size Requirement), 1 hr	m3	10
3.7	Sludge Holding tank (no size requirement)	m3	5
3.8	Sludge drying beds (26.2sqm)	m2	9 X 3

EQUIPMENT (FOR 15 YEARS DESIGN HORIZON)

item no.	Description	Unit	Head, M	Pump Capacity Needed	Quantity needed
4.1	Areation blowers	m3/min	0.4kg/m2	1.7	2
4.2	Fine bubble areators (EPDM)	nos	3	27	2
4.3	Pumps PST - AT. 216.6/24/60 X 4.78 /2 x 0.8(15yrs)	m3/min	6	0.29	2
4.4	Pumps Sea Outfall	m3/min	18	0.29	2
4.5	Pumps SHT - SDB 0. 1m3/min	m3/min	6	0.1	2
4.6	Pumps for effluent recovery from SDB - AT	m3/min	6	0.1	2

SL050,1750rpm

1.7 kw

SEV.65.65.22.2.50D

2.8 kw

SEV.65.65.22.2.50D

2.8 kw

SEG.40.09.2.50B

1.4kw

SEG.40.09.2.50B

1.4kw