1 X 500 MW FGUTPP THERMAL POWER PLANT STAGE IV

DETAILS OF CIVIL, STRUCTURAL AND ARCHITECTURAL WORKS

Sl No.	Civil Works	Structure Type	Unit Details				
			No. of Units	No. of floors	Length (m)	Width (m)	Height (m)
Balance of Plant Systems			nos	nos	m	m	m
608	Permanent Store						
	O & M Store of 3000sqm	RCC framed	1	2			
610	Canteen Building (Green Building) (1000 sqmtr)	RCC framed	1	4			
634	Fuel Oil Handling System						
	Unloading cum pressurizing pump house including C&I, Elec & Trichy requirements	RCC framed	1	1	52.5	7.5	6
	Sump						
	Toilet	RCC framed	1	1			
	LDO Tank foundation		1		10		1.1
	Dyke area (paving & wall)		1		20	20	
	Tanker unloading platform		1		10	20	1.5
	Fencing		4		23	23	
	Oil water seperator pit		1		15	2	2.5
	Interconnecting piping support pedestals & foundations						
635, 636, 637	Water Treatment Systems						
	Pre treatment plant						
	Clarified water pump house including control room, MCC room & toilet	steel framed	1	1	9	6	4.5
	Clarified water reservoir						
	Clarified water channel						
	CWTP dyke area		1		14.2	9.5	
	CWTP building	RCC framed	1	1	11	10.5	6
	Common control room & MCC room for CWTP & chlorination plant including toilet	RCC framed	1	1	12	10.5	4
	Dilution water overhead tank		1				3.5

1 X 500 MW FGUTPP THERMAL POWER PLANT STAGE IV

DETAILS OF CIVIL, STRUCTURAL AND ARCHITECTURAL WORKS

Sl No.	Civil Works	Structure	Unit Details				
		Type	No. of Units	No. of floors	Length (m)	Width (m)	Height (m)
	Chlorination plant building including tonner storage area	steel framed	1	1	24	10	5.5
	Chlorinator room adjacent to chlorination plant	steel framed	1	1	12	10	3.5
	Control & panel room (two storey) adjacent to chlorinator room	steel framed	1	2	6	6	3.75
	Leak chlorine neutralization area	open area	1		12	6	
	Toilet	RCC framed	1	1	4	3	3
	ETP waste / service water sump		1		9	8	
	ETP waste / service water pump house	steel framed	1	1	8	5	5.5
	ETP flash mixer, flocculation tank & lamella clarifier		1				
	ETP CMB		1		9	5.5	4.5
	Treated effluent disposal pump house	steel framed	1	1	9	4.5	5.5
	Control & MCC room for ETP pump houses	RCC framed	1	1			
	ETP waste water collection sumps						
	ETP chemical house						
	RO MB treatment plant						
	DM transfer pump house including control room, MCC room & toilet	steel framed	1	1			
	DM tank foundations		2		10		
638, 639	Condensate system						
	Condensate storage tank foundation		1		8		
	Condensate transfer pump house	steel framed	1	1			
	CPU regeneration building including control room/ MCC room & toilet	RCC framed	1	1	25	14	9, 6, 4

1 X 500 MW FGUTPP THERMAL POWER PLANT STAGE IV

DETAILS OF CIVIL, STRUCTURAL AND ARCHITECTURAL WORKS

Sl No.	Civil Works	Structure	Unit Details				
		Type	No. of Units	No. of floors	Length (m)	Width (m)	Height (m)
	Acid/ alkali storage tank dyke area		1		17.5	10	
	DM storage tank foundation		2		8.5		
	RCC lime tank		1		2	1	1.5
	Chain link fencing		1		22	14	
	Neutralization Pit		1		10	10	5
644	Hydrogen Generation Plant						
	Hydrogen generation building including control room, MCC room & toilet	RCC framed	1	1			
	Fencing of hydrogen generation building		1				
649, 650	Fire Fighting System						
	Fire water pump house	RCC framed	1	1	32	8.7	8
	Control room & switchgear room for FWPH	RCC framed	1	1	25	6	5.5
	Fire Booster Pump House	RCC framed	1	1	12	8	5
	Foam pump house	RCC framed	1	1	8	8	5
	Fire station building	RCC framed	1	1	22	10	7
	Fire water tank foundations		2		20		
	Hydropneumatic tank foundation		1		3		
	CW pump house	steel framed	1	1	30.9	15	19
	Control room for CWPH	steel framed	1	1	15	7	4.5
	MCC room for CWPH	steel framed	1	1	22	8	4.5
	CW Sump		1		20.1	18	11
	CW forebay		1		18	13.55	9
	Steel lined concrete encased CW ducts						
	Valve pits						
	Manholes & chambers for flow measurement						

1 X 500 MW FGUTPP THERMAL POWER PLANT STAGE IV

DETAILS OF CIVIL, STRUCTURAL AND ARCHITECTURAL WORKS

Sl No.	Civil Works	Structure	Unit Details				
		Type	No. of Units	No. of floors	Length (m)	Width (m)	Height (m)
	RCC CW channel from both IDCT to junction point		1		65	3.5	5.3
	RCC CW channel from junction point to CW forebay		1		200	7	6.8
654	Make up Water System						
	Control room for RWPH	steel framed	1	1	8	7	
	MCC room for RWPH	steel framed	1	1	7	7	
	RW Sump		1		15	6.5	3
	RW forebay		1		10	10	2
	Interconnection of RWPH forebay with existing pit outside makeup water channel						
	Valve pits						
662	Culverts						
671	Drinking Water & Service Water System						
	Potable water tank						
	Service water tank						
	Service water sump		1		10	7	4.5
	Service water pump house		1		15	7	5.5
672	Storm Water Drainage						
	Garland drains						
	Drainage pump house (if any)						
	Drains along roads						
	Trunk drains						
	Rerouting of existing drains						
673	Sewage Disposal System						
	Sewerage						
	Sewage pump house (if any)						
	Rebuilt of existing sewerage						
674	Cable Trenches, Duct Bank						
	Cable trenches in plant area						
	Duct banks in plant area						
	Cable pits						
	Cable trestle pedestals in plant area						
675	Pipe Trench & Pipe Rack						

1 X 500 MW FGUTPP THERMAL POWER PLANT STAGE IV

DETAILS OF CIVIL, STRUCTURAL AND ARCHITECTURAL WORKS

Sl No.	Civil Works	Structure	Unit Details				
		Type	No. of Units	No. of floors	Length (m)	Width (m)	Height (m)
	Pipe / cable rack in plant area			2	3	3	11.5
	RCC fire trenches in plant area						11.5
	Pipe pedestals in plant area						11.5
	Thrust blocks						
	Valve pits						
Dismantling & Relocation							
	Ash Slurry Pipes						

Note :-

1. Piling has been considered for Pipe rack near railway line and TP adjacent to boundary wall.

2. For Pipe cum cable rack cum ash slurry pipe line from Fuel oil area to main plant area has space constraints.