

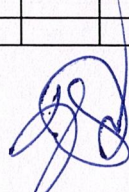
Bharat Heavy Elcetricals Limited BAP-Ranipet				
CCTV System- Bill of Materials				
Sl no.	Item Description	Unit	Item Qty	Remarks
1	Fixed outdoor IR bullet IP camera with accessories	No	20	Make, Model & Serial No separately attached
2	Hi-speed Out door PTZ IP dome day/night camera with accessories	No	16	Make, Model & Serial No separately attached
3	Point to multipoint base wireless Radio station at Control room/ Admin Building	Set	4	
4	Point to point base wireless station Configurable on 5 MHz increments - At camera end	No	13	
5	Application & display server	No	1	
6	Network attached Storage(NAS) servers	No	1	
7	Client work station with 22" LED monitor	No	4	
8	Video management and analytics software	No	1	Software Application in Server
9	46" LED video display unit (Samsung MD46B)	No	4	
10	4 TB smart video HDD storage device with accessories	No	20	
11	1KVA UPS with min 1 hr back-up for powering the cameras	No	36	
12	3KVA online UPS with min 1 hr. back-up) for control room equipment (NAS server, monitors, application server).	No	1	
13	GI poles	No	25	
14	Tower structure with proper surge protection	No	14	
15	CAT-6 cables (2000mtrs)	Lot	1	
16	Fiber optic cables (5000mtrs)	Lot	1	
17	Patch cables	Lot	1	
18	Required PVC pipes (HDPE pipe)with accessories (4000mtrs)	Lot	1	
19	Network active and passive material with required accessories for camera end and control room. (Including POE-20 nos, POE + - 16nos switches and Media converter-32nos)	Lot	1	
20	All Trenching & Civil works	Lot	1	
21	Accessories	Lot	1	


S. PANNEERSELVAM
 Dy. General Manager
 Electrical Service / M&S
 BHEL / BAP / RANIPET - 6.

Bharat Heavy Electricals Limited
BAP-Ranipet

CCTV- Equipement Location Details

SL No	Description	Bullet Camera	PTZ Camera	Tower	Pole	Ethernet Switch	Media Conevrtor	Point to Multipoint Radio	Point to Point Wireless Radio	Outdoor Termination Box	UPS	Server	Workstation	Display	Storage server	39U Rack
1	Factory Main Gate		1		1											
2	Factory Main gate IN	1														
3	Factory Main Gate Out	1														
4	Admin Gate		1			1	1				1					
5	Admin Gate	1			1					1						
6	LPG		1	1	1	1			1	1	1					
7	LPG	1			1					1	1					
8	R1 Bay		1	1					1	1	1					
9	APH		1	1		1			1	1	1					
10	FAN Shop		1													
11	East Gate IN	1		1		1				1	1					
12	East Gate Out	1														
13	East Gate		1						1							
14	Shipping Gate IN	1		1	1	1			1	1	1					
15	Shipping Gate OUT	1														
16	Shipping Gate		1													
17	Security Barracks		1	1	1	1			1	1	1					
18	Old Tunnel	1														


S. PANNEERSELVAM
 Dy. General Manager
 Electrical Service / M&S
 BHEL / BAP / RANIPET - 6.

19	Wicket Gate		1		1		1			1	1					
20	Recreation Club	1					1			1	1					
21	Shopping Complex	1		1	2	1	1			1	1	1				
22	Shopping Complex	1			1											
23	ED Junction		1		1		1			1	1					
24	Puliyanthangal Gate	1		1	1					1	1	1				
25	New T/S West Gate		1	1	1	1				1	1	1				
26	New T/S Water Tank		1		1		1			1	1					
27	S3 Yard IN	1			1	1	1				1	1				
28	S3 Yard		1	1	1					1	1	1				
29	S4 Yard IN	1			1						1	1				
30	S4 Yard		1	1	1	1	1			1	1	1				
31	Solar plant		1	1	1					1	1	1				
32	Township Gate IN	1			1	1	1				1	1				
33	Township Gate Out	1														
34	Ambedhkar Statue	1			1											
35	Varasanthai	1			2		1				1	1				
36	Kalyana mandapam	1			1		1				1	1				
37	Palar club			1	1	1	1			1	1	1				
38	Admin Tower			1		1	1	4			1	1				
39	ED Office															1
40	GM(S&OM)															1

S. PANNEERSELVAM
Dy. General Manager
Electrical Service / M&S
DHEL / BAP / RANIPET - 8.

41	GM(O)						1						1			
42	Security Office												1			
43	Control Room					2					1	1		4	1	1
	Total	20	16	14	25	15	14	4	13	25	26	1	4	4	1	1


S. PANNEERSELVAM
 Dy. General Manager
 Electrical Service / M&S
 BHEL / BAP / RANIPET - 6.

Bharat Heavy Electricals Limited										
CCTV- Make, Model& Serial No										
SL No	Device Location	Camera Ty	Make	Device Type	IPv4 Address	Port	Software Version	Device Serial Number	Subnet Ma	MAC Address
1	Township Entrance IN	Bullet	HIKVISION	DS-2CD2043G0-I	192.168.1.101	8000	V5.6.0build 190507	26065609	255.255.25	68-6d-bc-57-b9-be
2	Township Entrance OUT	Bullet	HIKVISION	DS-2CD2622FWD-IS	192.168.1.102	8000	V5.5.82build 190909	520715140	255.255.25	c4-2f-90-33-70-a2
3	Varasandhai	Bullet	HIKVISION	DS-2CD2620FWD-IS	192.168.1.103	8000	V5.3.1build 150410	520715135	255.255.25	c4-2f-90-33-70-9d
4	Kalyanamandapam	Bullet	HIKVISION	DS-2CD2620FWD-IS	192.168.1.104	8000	V5.3.1build 150410	520715145	255.255.25	c4-2f-90-33-70-a7
5	Ambedhkar Statue	Bullet	HIKVISION	DS-2CD4212FWD-I-ZS	192.168.1.105	8000	V5.3.4build 150812	560462729	255.255.25	28-57-be-45-89-44
6	Recreation club	Bullet	HIKVISION	DS-2CD2620FWD-IS	192.168.1.106	8000	V5.3.1build 150410	520715147	255.255.25	c4-2f-90-33-70-a9
7	New Township Water Tank	PTZ	HIKVISION	DS-2DF8236IV-AEL	192.168.1.107	8000	V5.3.0build 150309	521377979	255.255.25	c4-2f-90-36-ad-b6
8	New Township West Gate	PTZ	HIKVISION	DS-2DE4225IW-DE	192.168.1.108	8000	V5.6.0build 190128	12930448W	255.255.25	98-8b-0a-78-ff-0e
9	Security Barracks	PTZ	HIKVISION	DS-2DF8236IV-AEL	192.168.1.109	8000	V5.3.0build 150309	521377973	255.255.25	c4-2f-90-36-ad-b0
10	Railway Wicketgate	PTZ	HIKVISION	DS-2DE5120I-AE	192.168.1.110	8000	V5.4.8build 170210	750425499	255.255.25	18-68-cb-4b-a7-e7
11	Shopping Complex	Bullet	HIKVISION	DS-2CD2620FWD-IS	192.168.1.111	8000	V5.3.1build 150410	520715138	255.255.25	c4-2f-90-33-70-a0
12	Shopping Complex	Bullet	HIKVISION	DS-2CD2620FWD-IS	192.168.1.112	8000	V5.3.1build 150410	520715143	255.255.25	c4-2f-90-33-70-a5
13	Old Tunnel	Bullet	HIKVISION	DS-2CD2232-IS	192.168.1.113	8000	V5.3.0build 151016	487939251	255.255.25	c0-56-e3-a8-07-7b
14	ED Bunglow	PTZ	HIKVISION	DS-2DE5120IW-AE	192.168.1.114	8000	V5.4.8build 170210	789403839	255.255.25	4c-bd-8f-1e-be-17
15	Puliyanthangal	Bullet	HIKVISION	DS-2CD2620FWD-IS	192.168.1.115	8000	V5.3.1build 150410	520715132	255.255.25	c4-2f-90-33-70-9a
16	Factory Main Gate	PTZ	HIKVISION	DS-2DE4120IW-DE	192.168.1.116	8000	V5.5.0build 170724	118291852W	255.255.25	b4-a3-82-2b-97-3b
17	Factory Main Gate IN	Bullet	HIKVISION	DS-2CD2620FWD-IS	192.168.1.117	8000	V5.3.1build 150410	520715135	255.255.25	c4-2f-90-33-70-9d
18	Factory Main Gate OUT	Bullet	HIKVISION	DS-2CD2620FWD-IS	192.168.1.118	8000	V5.3.1build 150410	520715142	255.255.25	c4-2f-90-33-70-a4
19	Admin Gate IN	Bullet	HIKVISION	DS-2CD2620FWD-IS	192.168.1.119	8000	V5.3.1build 150410	520715134	255.255.25	c4-2f-90-33-70-9c
20	Admin Gate	PTZ	HIKVISION	DS-2DF8336IV-A	192.168.1.120	8000	V5.3.2build 150519	535327501	255.255.25	c4-2f-90-7d-31-be
21	Shipping Gate	PTZ	HIKVISION	DS-2DE4225IW-DE	192.168.1.121	8000	V5.5.3build 171214	07868996W	255.255.25	98-8b-0a-59-b8-2c
22	Shipping Gate IN	Bullet	HIKVISION	DS-2CD2620F-RZS	192.168.1.122	8000	V5.4.5build 170406	621981736	255.255.25	bc-ad-28-c1-b3-ae
23	Shipping Gate OUT	Bullet	HIKVISION	DS-2CD2620F-IS	192.168.1.123	8000	V5.2.3build 141024	501264247	255.255.25	c0-56-e3-f9-f7-f1
24	East Gate	PTZ	HIKVISION	DS-2DF8236IV-AEL	192.168.1.124	8000	V5.3.0build 150309	521377984	255.255.25	c4-2f-90-36-ad-bb
25	East Gate IN	Bullet	HIKVISION	DS-2CD2620FWD-IS	192.168.1.125	8000	V5.3.1build 150410	520715133	255.255.25	c4-2f-90-33-70-9b
26	East Gate OUT	Bullet	HIKVISION	DS-2CD2620FWD-IS	192.168.1.126	8000	V5.3.1build 150410	520715137	255.255.25	c4-2f-90-33-70-9f
27	APH Shop	PTZ	HIKVISION	DS-2DE4225IW-DE	192.168.1.127	8000	V5.6.0build 190128	12930393W	255.255.25	98-8b-0a-78-fe-d7
28	FAN Shop	PTZ	HIKVISION	DS-2DF8236IV-AEL	192.168.1.128	8000	V5.3.0build 150309	521377978	255.255.25	c4-2f-90-36-ad-b5
29	R1 Bay	PTZ	HIKVISION	DS-2DE5120IW-AE	192.168.1.129	8000	V5.4.8build 170210	789425486	255.255.255.0	
30	LPG yard	PTZ	HIKVISION	DS-2DF8236IV-AEL	192.168.1.130	8000	V5.3.2build 150519	513887895	255.255.255.0	
31	LPG yard	Bullet	HIKVISION	DS-2CD2622FWD-IS	192.168.1.131	8000	V5.5.82build 190909	627540524	255.255.255.0	
32	S3 Yard IN	Bullet	HIKVISION	DS-2CD2620FWD-IS	192.168.1.132	8000	V5.3.1build 150410	520715146	255.255.25	c4-2f-90-33-70-a8
33	S3 Yard	PTZ	HIKVISION	DS-2DE4120IW-DE	192.168.1.133	8000	V5.5.0build 170724	118291867W	255.255.25	b4-a3-82-2b-97-4a
34	S4 Yard IN	Bullet	HIKVISION	DS-2CD2620FWD-IS	192.168.1.134	8000	V5.3.1build 150410	520715144	255.255.25	c4-2f-90-33-70-a6
35	S4 Yard	PTZ	HIKVISION	DS-2DE4225IW-DE	192.168.1.135	8000	V5.5.3build 171214	07868993W	255.255.25	98-8b-0a-59-b8-29
36	Solar Plant	PTZ	HIKVISION	DS-2DE4225IW-DE	192.168.1.136	8000	V5.6.13build 190610	57653132W	255.255.25	bc-ba-c2-ce-cc-7c


S. PANNEERSELVAM
 Dy. General Manager
 Electrical Service / M&S
 RHEL / BAP / RANIPET - 6.

Bharat Heavy Electricals Limited
BAP-Ranipet

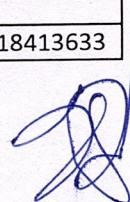
CCTV- Equipement Location Details

SL No	Device Location	Server			Workstation			Storage server		
		Make	Model	SN No	Make	Model	SN No	Make	Model	SN No
1	ED Office	HP	Z220							
2	GM(S&OM)	HP	Z220							
3	GM(O)	HP	Z220							
4	Security Office	HP	Z220							
5	Control Room				HP	Z440	SGH511PSDX	QNAP	TS-EC1680U	



S. PANNEERSELVAM
 Dy. General Manager
 Electrical Service / M&S
 BHEL / BAP / RANIPET - 6.

Bharat Heavy Electricals Limited				
BAP-Ranipet				
CCTV- Equipement Location Details				
SL No	Device Location	UPS		
		Make	Model	SN No
1	Admin Gate	NUMERIC	Digital 1000 plus	
2	LPG	NUMERIC	Digital 1000 plus	
3	LPG	NUMERIC	Digital 1000 plus	
4	R1 Bay	NUMERIC	Digital 1000 plus	
5	APH	NUMERIC	Digital 1000 plus	
6	East Gate IN	NUMERIC	Digital 1000 plus	
7	Shipping Gate IN	NUMERIC	Digital 1000 plus	
8	Security Barracks	NUMERIC	Digital 1000 plus	YTV1518413672
9	Wicket Gate	NUMERIC	Digital 1000 plus	
10	Recreation Club	NUMERIC	Digital 1000 plus	YTV1518414268
11	Shopping Complex	NUMERIC	Digital 1000 plus	12190111826
12	ED Junction	NUMERIC	Digital 1000 plus	YTV1518414281
13	Puliyanthangal Gate	NUMERIC	Digital 1000 plus	12190111871
14	New T/S West Gate	NUMERIC	Digital 1000 plus	YTV1517411415
15	New T/S Water Tank	NUMERIC	Digital 1000 plus	4419055 16797
16	S3 Yard IN	NUMERIC	Digital 1000 plus	
17	S3 Yard	NUMERIC	Digital 1000 plus	
18	S4 Yard IN	NUMERIC	Digital 1000 plus	
19	S4 Yard	NUMERIC	Digital 1000 plus	
20	Solar plant	NUMERIC	Digital 1000 plus	
21	Township Gate IN	NUMERIC	Digital 1000 plus	YTV1518413660
22	Varasanthai	NUMERIC	Digital 1000 plus	YTV1518413658
23	Kalyana mandapam	NUMERIC	Digital 1000 plus	YTV1518413633



S. PANNEERSELVAM
 Dy. General Manager
 Electrical Services / M&S
 BHEL BAP / RANIPET - 3.

24	Palar club	NUMERIC	Digital 1000 plus	YTV1517411702
25	Admin Tower	NUMERIC	Digital 1000 plus	
26	Control Room	Numeric	3KVA	1150201748



S. PANNEERSELVAM
Dy. General Manager
Electrical Service / M&S
BHEL / PAP / RANIPET - 6.