DETAILED DEMAND LOAD CALCULATION : AS ON 11/05/2018 (REV:1)

PROJECT : PROPOSED BUILDING G+IV, B+G+VII & B+G+VII STORIED RESIDENTIAL COMPLEX AT MOUZA-MALIPUKURIA,SONARPUR, DIST-SOUTH 24 PGS. FOR J.G. DEVELOPMENT PVT. LTD.

SR.NO	DESCRIPTION OF AREA			FOR MAIN SUPPLY				FOR DG SUPPLY			
				ALLOTED LOAD(KW)	CONNECTED LOAD(KW)	DIVERSITY FACTOR (DF)	MAX. DEMAND LOAD (KW)	ALLOTED LOAD(KW)	CONNECTED LOAD(KW)	DIVERSITY FACTOR (DF)	MAX. DEMAND LOAD (KW)
	INDOOR AREA-RESIDENTIAL - BLOCK-1 (B+G+VII)										
1	BASEMENT PARKING AREA	4,840.57	SFt.		1.69	0.80	1.36		1.69	0.80	1.36
2	GROUND FLOOR COMMON/PARKING AREA	4,840.57	SFt.		2.18	0.80	1.74		2.18	0.80	1.74
3	FLAT TYPE -2 BHK(B- TYPE)	42.00	NOS	3.81		0.50	80.01	0.50		1.00	21.00
4	INDOOR COMMON AREA				1.75	0.80	1.40		1.75	0.80	1.40
	SUB-TOTAL- INDOOR AREA-RESIDENTIAL - BLOCK-1 (B+G+VII)						**84.51**				**25.50**
	INDOOR AREA-RESIDENTIAL - BLOCK-2 (B+G+VII)										
5	BASEMENT PARKING AREA	9,958.75	SFt.		13.44	0.80	10.76		13.44	0.80	10.76
6	GROUND FLOOR COMMON/PARKING AREA	9,958.75	SFt.		4.48	0.80	3.59		4.48	0.80	3.59
7	FLAT TYPE -2 BHK(B- TYPE)	84.00	NOS	3.81		0.50	160.02	0.50		1.00	42.00
8	INDOOR COMMON AREA				1.75	0.80	1.40		1.75	0.80	1.40
	SUB-TOTAL- INDOOR AREA-RESIDENTIAL - BLOCK-2 (B+G+VII)						**175.76**				**57.74**
	INDOOR AREA-RESIDENTIAL - BLOCK-3 (G+IV)										
9	GROUND FLOOR COMMON/PARKING AREA	1,895.11	SFt.		0.85	0.80	0.68		0.85	0.80	0.68
10	FLAT TYPE -3 BHK(C- TYPE)	8.00	NOS	5.13		0.50	20.52	0.60		1.00	4.80
11	INDOOR COMMON AREA				1.00	0.80	0.80		1.00	0.80	0.80
	SUB-TOTAL- INDOOR AREA-RESIDENTIAL - BLOCK-3 (G+IV)						**22.00**				**6.28**
	OUTDOOR AREA										
12	YARD AND OUTDOOR AREA				2.50	0.80	2.00		2.50	0.80	2.00
	FIRE-FIGHTING LOAD										
13	MAIN FIRE PUMP	2.00	NOS	60.00	120.00	1.00	120.00		120.00	1.00	120.00
14	JOCKEY PUMP	1.00	NOS	5.50	5.50	1.00	-		5.50	1.00	-
	UTILITY LOAD										
15	LIFT LOAD	6.00	NOS	7.46	44.76	0.60	26.86		44.76	0.60	26.86
	PHE LOAD										
16	SUMP PUMP (2NOS =1W +1S - ACTUAL)	1.00	NOS	1.10	1.10	0.60	0.66		1.10	0.60	0.66
17	RAW WATER FEED PUMP (2NOS =1W +1S - ACTUAL)	1.00	NOS	2.20	2.20	0.60	1.32		2.20	0.60	1.32
18	DOMESTIC WATER TRANSFER PUMP (BL-1&3) (2NOS =1W +1S - ACTUAL)	1.00	NOS	3.00	3.00	0.60	1.80		3.00	0.60	1.80
19	DOMESTIC WATER TRANSFER PUMP (BL-2) (2NOS =1W +1S - ACTUAL)	1.00	NOS	5.50	5.50	0.60	3.30		5.50	0.60	3.30
20	SUBMERSIBLE PUMP (2NOS)	2.00	NOS	7.50	15.00	0.60	9.00		15.00	0.60	9.00
	SUB-TOTAL- ALL UTILITY & COMMON SERVICES						**164.94**				**164.94**
	TOTAL DEMAND LOAD (KW)						**447.21**				**254.46**
	TOTAL DEMAND LOAD AT 0.8P.F. LOAD (KVA)						**559.01**				**318.07**
	HENCE, THE CONTRACT DEMAND (KVA) WITH WBSEDCL					**SAY,**	**≈ 559**				
	HENCE, THE CONTRACT DEMAND (HP) WITH WBSEDCL					**SAY,**	**≈ 600**				
	EFFICIENCY SELECTED OF TRANSFORMER @90%						**621.12**				
	HENCE, TRANSFORMER IS PROPOSED (KVA)					**SAY,**	**≈ 621**				
							≈ 2X315KVA				
						OR	**≈ 1X630KVA**				
	EFFICIENCY SELECTED OF DG-SET @80%										**397.59**
	HENCE,DISEL-GENERATOR IS PROPOSED (KVA)									**SAY,**	**≈ 398**
											≈ 400 KVA

APOGEE DESIGN & CONSULTING