

					Date : 29.10.2020
PROJECT: SILVERGLADES HIGHTOWN AT GURUGRAM					
ELECTRICAL LOAD CALCULATION FOR SUB-STATION (COMMERCIAL & RESIDENTIAL BLOCK)					
		SUB-STATION -1 (COMMERCIAL SUBSTATION)	SUB-STATION -2 (RESIDENTIAL SUBSTATION)	TOTAL ESS-1 & ESS2	
1	Substation/ Transformer Calculation				
	Total Load in K.W	2446 KW	2650 KW	5096 KW	
	Overall DF @0.85 Load Factor (for Commercial)	2079.10			
	Overall DF @0.75 Load Factor (for Residential)		1987.50	4067 KW	
	Load in KVA on Transformer @0.95 PF	2188.53	2092.11	4281 KVA	
	Loading on Transformer@80%	2735.66	2615.13		
	Proposed Transformer Capacity/ Rating	(1 NO 2000KVA +1 NO 1600KVA) 33/.433KV Dry Type Transformer	(2 NO 1600KVA) 33/.433KV Dry Type Transformer		
	Proposed DG Set Capacity/ Rating	2Nos 1500KVA+1Nos 810KVA DG SET	2Nos 1500KVA +1Nos 500KVA DG SET		

PROPOSED BUILDING PLANS OF RESIDENTIAL

GROUP HOUSING COLONY UNDER TRANSIT ORIENTED DEVELOPMENT (TOD) POLICY FOR MIX LAND USE COLONY (70%RESIDENTIAL+30%COMMERCIAL)

MEASURING 4.85 ACRES

(LICENSE No. 110 OF 2013 DATED 27.12.2013)

IN SECTOR - 28, GURUGRAM MANESAR URBAN

COMPLEX BEING DEVELOPED BY SILVERGLADES INFRASTRUCTURE PVT. LTD.

CLIENT:

GROUP SILVERGLADES
5TH FLOOR, TIMES SQUARE BUILDING
B-BLOCK, SUSHANT LOK PHASE-I,
GURGAON 122002

ARCHITECTS :

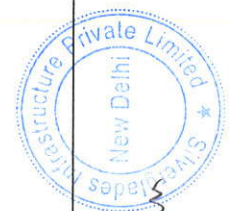
M/s Design Forum International
K-47, Kailash Colony,
New Delhi-110 048
Phone : 011-46556600

MEP CONSULTANT :

M/s Engineering Services Consultants
Vardhman South Plaza,
3rd Floor, Local Shopping Centre,
Pocket - 'H' Market,
Sarita Vihar, New Delhi-110076.
Phone & Fax : 2994 3394, 40537584



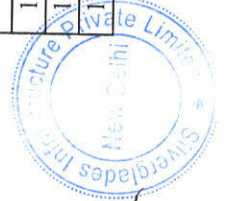
ANAND SHARMA
B. Archt (Hons) & C.A.
10A/10B, Sector 28, Gurugram, Haryana - 122996



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PROJECT : SILVER GLADES-DOWNTOWN AT GURUGRAM										
ELECTRICAL LOAD CALCULATION FOR COMMERCIAL BLOCK AS PER ACTUAL ESTIMATED LOAD (ANNEXURE-I)										
S.No	Area Reference	ELECTRICAL LOAD (in KW)					Specific Additional Load in KW	Total Load in KW	Diversity Factor	Total Maximum Demand Load
		Lighting & Power	AC LOAD	Normal Ventilation Load	Emergency Ventilation Load					
	COMMERCIAL BLOCK									
1.0	BASEMENT-1 (6478sqm @ 5watt/sqm) (L+P)	32.39	493.1	86.4	156.4*			611.9KW	0.60	367.1KW
2.0	BASEMENT-2 (6478sqm @ 5watt/sqm) (L+P)	32.39	0	173.1	211.5*			205.5KW	0.60	123.3KW
3.0	BASEMENT-3 (822sqm @ 5watt/sqm) (L+P)	4.11	0	6	12*			10.1KW	0.60	6.1KW
4.0	GROUND FLOOR (ANCHOR/SHOPS/COMMON AREA)	245.0	313.1	2.3	0*			560.4KW	0.60	336.3KW
5.0	FIRST FLOOR (ANCHOR/SHOPS/COMMON AREA)	249.8	309.6	1.9	0*			561.3KW	0.60	336.8KW
6.0	SECOND FLOOR (ANCHOR/SHOPS/RESTAURENT/COMMON AREA)	255.1	264.3	32.9	2.2*			552.3KW	0.60	331.4KW
7.0	THIRD FLOOR (RESTAURENT & KIOSK /COMMON AREA)	136.8	136.1	47.0	12*			319.9KW	0.60	191.9KW
8.0	FOURTH & FIFTH FLOOR- MALL AREA / Common Area	212.53	14.4	0.0	0.0			226.9KW	0.60	136.2KW
9.0	FIFTH FLOOR -Office Area +Common area	43.73	12.6	0.7	2.2			59.2KW	0.60	35.5KW
10.0	SIXTH FLOOR -Office Area +Common area	43.73	23.4	0.7	19.7*			67.8KW	0.60	40.7KW
11.0	SEVENTH FLOOR -Office Area +Common area	43.73	34.6	0.7	2.2*			79.0KW	0.60	47.4KW
12.0	EIGHTH FLOOR -Office Area +Common area	43.73	12.6	0.7	2.2*			57.0KW	0.60	34.2KW
13.0	NINETH FLOOR -Office Area +Common area	43.73	12.6	0.7	2.2*			57.0KW	0.60	34.2KW
14.0	TERRACE (2ND Floor Terrace for DX Unit Pump+Cooling Tower)		144.0	0.0	34*			144.0KW	0.60	86.4KW
15.0	LIFTS (9 Nos @15Kw Each)						135	135.0KW	0.80	108.0KW
16.0	ESCALATORS (10 Nos @ 10Kw Each)						100	100.0KW	0.80	80.0KW
17.0	Mechanical Car Parking -95Nos @ 2.20kw each						209	209.0KW	0.40	83.6KW

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S.No	Area Reference	ELECTRICAL LOAD (in KW)				Specific Additional Load in KW	Total Load in KW	Diversity Factor	Total Maximum Demand Load
		Lighting & Power	AC LOAD	Normal Ventilation Load	Emergency Ventilation Load				
18.0	PLUMBING LOADS (Water Supply, Drainage sump)					28.00	28.0KW	0.80	22.4KW
19.0	STP Load (STP Panel+ Plant Load)					26.00	26.0KW	0.80	20.8KW
20.0	FIRE FIGHTING LOADS (Total Load 200 KW only Jockey Pump Load Considered)					14.92	14.9KW	0.80	11.9KW
21.0	EXTERNAL LIGHTING					15	15.0KW	0.80	12.0KW
	Total Load					528	4040		2446.27

	Capacity of Transformer								
1	Total Load in K.W								2446.27
2	Overall DF @0.85 Load Factor								2079.33
3	Load in KVA on Transformer @0.95 PF								2188.77
4	Loading on Transformer@80%								2735.96
5	Equipment capacity proposed								
	Capacity of DG Sets								
1	Total Load in KW								2446.27
2	Overall DF @0.85 Load Factor								2079.33
3	Load in KVA on DG SET @0.80 PF								2599.16
4	Loading on DG @80%								3248.95
5	Equipment capacity proposed								
	Load Marked '*' shall be dead load and hence demand shall be NIL								
	For Detailing of HV/AC Load refer HV/AC Load Sheet								



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C.A. No. 1008, AIIA/A-12796



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PROJECT : SILVER GLADES-DOWNTOWN AT GURUGRAM

LOAD STATEMENT FOR RESIDENTIAL TOWER AS PER ACTUAL ESTIMATED LOAD (ANNEXURE-II)

S.No	Description	Area		Load per Sq metre for		Total Connected Load	Diversity Factor	Total Maximum Demand Load
				Lighting & Power	Light & Power			
		In Sqm.	In Sqft.	Watt/m	K.W	in kW		21.10.2020
1.0	RESIDENTIAL TOWER (L & P)							
i)	3 BHK @104 Flats	122.00	1312.72	25.00 Watt	3.1 KW	317.2 KW	0.50	158.6 KW
ii)	3 BHK @52 Flats	151.00	1624.76	25.00 Watt	3.8 KW	196.3 KW	0.50	98.2 KW
iii)	4 BHK @104 Flats	203.00	2184.28	25.00 Watt	5.1 KW	527.8 KW	0.50	263.9 KW
iv)	Pent House @ 4Nos	260.18	2799.54	25.00 Watt	6.5 KW	26.0 KW	0.50	13.0 KW
v)	EWS Flats 20 Nos @ 3KW each				3.0 KW	60.0 KW	0.50	30.0 KW
vi)	Club (Lighting & Power)	1200.00	12912.00	40.00 Watt		48.0 KW	0.50	24.0 KW
vii)	Club (AC Load)					100.7 KW	0.50	50.4 KW
viii)	Basement-1	8355.00	89899.80	5.00 Watt	41.8 KW	41.8 KW	0.50	20.9 KW
ix)	Basement-2	9041.00	97281.16	5.00 Watt	45.2 KW	45.2 KW	0.50	22.6 KW
2.0	RESIDENTIAL TOWER (HVAC LOAD)							
i)	Tower-A					1557.8 KW	0.50	778.9 KW
ii)	Tower-B					749.2 KW	0.50	374.6 KW
iii)	Tower-C					747.2 KW	0.50	373.6 KW
3.0	BASEMENT VENTILATION (B1+B2)							
i)	NORMAL CASE					293.0 KW	0.50	146.5 KW
ii)	EMERGENCY CASE					472.3*		472.3*
4.0	Stilt / Entrance							
i)	4 BHK (Tower-A)	323.55	3481.40	50.00 Watt		16.2 KW	0.50	8.1 KW
ii)	3 BHK (Tower-B)	181.20	1949.71	50.00 Watt		9.1 KW	0.50	4.5 KW
iii)	3 BHK (Tower-C)	181.20	1949.71	50.00 Watt		9.1 KW	0.50	4.5 KW
5.0	Common Area							
i)	4 BHK (Tower-A) From 1st to 28th Floor	28.00		200 W per Floor		5.60 KW	0.80	4.5 KW
ii)	3 BHK (Tower-B) From 1st to 26th Floor	26.00		200 W per Floor		5.20 KW	0.80	4.2 KW
iii)	3 BHK (Tower-C) From 1st to 26th Floor	26.00		200 W per Floor		5.20 KW	0.80	4.2 KW
6.0	Lifts							
i)	4 BHK (Tower-A) 5Nos@15kw each					75.00 KW	0.60	45.0 KW
ii)	3 BHK (Tower-B) 3Nos@15kw each					45.00 KW	0.60	27.0 KW
iii)	3 BHK (Tower-C) 3 Nos@15kw each					45.00 KW	0.60	27.0 KW
7.0	Pressurization for lifts (Tower-A+B+C)					85.80KW*		

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S.No	Description	Area	Load for Light & Power	Load for Light & Power	Total Connected Load	Diversity Factor	Total Maximum Demand Load
8.0	Mechanical Car Parking 123Nos @ 2.20kw each				270.60 KW	0.20	54.1 KW
9.0	External Lighting				15.00 KW	0.80	12.0 KW
10.0	Service Load						
i)	PHE Works (Water Supply, Drainage)				58.00 KW	0.60	34.8 KW
ii)	STP Load (STP Panel+Plant Load)				34.00 KW	0.60	20.4 KW
iii)	Fire Fighting Load				520.00 KW		44.8 KW
	Total Load				5823.1 KW		2650.1 KW
	Capacity of Transformer						
1	Total Load in K.W						2650.13
2	Overall DF @0.75Load Factor						1987.60
3	Load in KVA on Transformer @0.95 PF						2092.21
4	Loading on Transformer@80%						2615.26
5	Equipment capacity proposed				2Nos 1600 KVA Transformer		
	Capacity of DG Sets						
1	Total Load in K.W						2650.13
2	Overall DF @0.75Load Factor						1987.60
3	Load in KVA on DG SET @0.80 PF						2484.49
4	Loading on DG @80%						3105.62
5	Equipment capacity proposed						
					2Nos 1500KVA +1Nos 500KVA DG SET		
	Load Marked 'x' shall be dead load and hence demand shall be NIL						
	For Detailing of HV/AC Load refer HV/AC Load Sheet						



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PROJECT: APPROVAL OF REVISED BUILDING PLANS OF RESIDENTIAL GROUP HOUSING COLONY UNDER TRANSIT ORIENTED DEVELOPMENT (TOD) POLICY FOR MIX LAND USE COLONY (70% RESIDENTIAL+30%COMMERCIAL) MEASURING 4.85 ACRES (LICENSE No. 110 OF 2013 DATED 27.12.2013) IN SECTOR - 28, GURUGRAM

Sub Work No. V
Sub-Head No. 01

Street Lighting

Amount in Rs.

1. Providing street lighting on roads as per standard specifications of HVPN approx 4.85 acres @100,000/acre

Rs. 4,85,000.00

Add 3 % contingencies and P.H. Charges

Rs. 14,550.00

Total

Rs. 4,99,550.00

Add 49% Departmental charges, Price Escalation, Unforeseen Admn.

Rs. 2,44,779.50

Total

Rs. 7,44,329.50

Carry Over to Final Abstract of cost

Say

Rs. 7.45 lacs

