

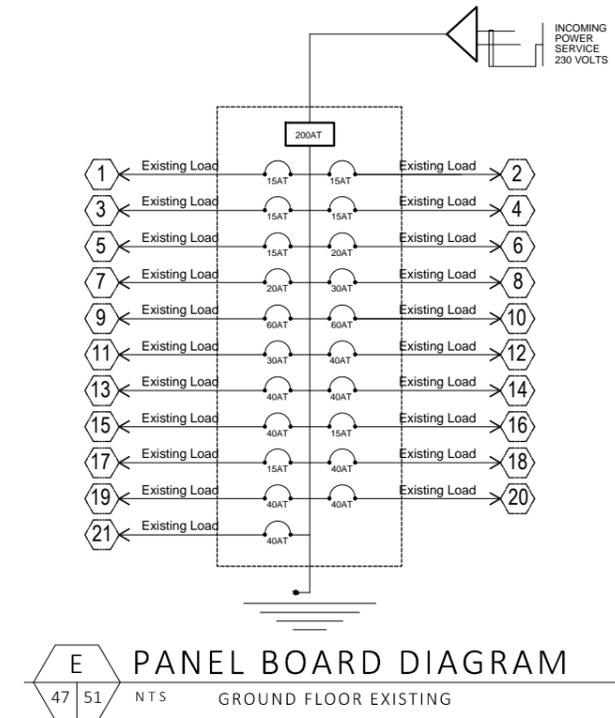
GROUND FLOOR (Existing Panelboard)														
CKT.NO	LOAD DESCRIPTION	NO. OF OUTLETS	VOLTAGE	TOTAL VA	AMP/CKT.	AMP./PHASE			CKT. PROTECTION		SIZE OF WIRE		SIZE OF CONDUIT	
						AB	BC	CA	AT	AF	mm <sup>2</sup>	TYPE	mm <sup>2</sup>	TYPE
1	Existing Load		230						15	50	2-2.0	THHN	20	PVC
2	Existing Load		230						15	50	2-2.0	THHN	20	PVC
3	Existing Load		230						15	50	2-2.0	THHN	20	PVC
4	Existing Load		230						15	50	2-2.0	THHN	20	PVC
5	Existing Load		230						15	50	2-2.0	THHN	20	PVC
6	Existing Load		230						20	50	2-2.0	THHN	20	PVC
7	Existing Load		230						20	50	2-3.5	THHN	20	PVC
8	Existing Load		230						30	50	2-3.5	THHN	20	PVC
9	Existing Load		230						60	50	3-5.5	THHN	20	PVC
10	Existing Load		230						60	50	3-5.5	THHN	20	PVC
11	Existing Load		230						30	50	3-3.5	THHN	20	PVC
12	Existing Load		230						40	50	3-3.5	THHN	20	PVC
13	Existing Load		230						40	50	3-5.5	THHN	20	PVC
14	Existing Load		230						40	50	3-3.5	THHN	20	PVC
15	Existing Load		230						40	50	3-3.5	THHN	20	PVC
16	Existing Load		230						15	50	2-2.0	THHN	20	PVC
17	Existing Load		230						15	50	2-2.0	THHN	20	PVC
18	Existing Load		230						40	50	3-3.5	THHN	20	PVC
19	Existing Load		230						40	50	3-3.5	THHN	20	PVC
20	Existing Load		230						40	50	3-3.5	THHN	20	PVC
21	Existing Load		230						40	50	3-3.5	THHN	20	PVC
<b>Total</b>						<b>17.80</b>	<b>15.20</b>	<b>3.10</b>						

Line Current = (1.73) x 17.80 = 30.79 A

For Feeder Conductor = 1.25 x 30.79 A = 38.49 A  
Use 3 - 80mm<sup>2</sup> THHN cu.wire in 65mm PVC Pipe

For Feeder Protection Use 200AT,200AF, 3Phase 230V, 60Hz, MCCB Bolt on Type

**Note: Main line of panelboard and panelboard is existing**



GROUND FLOOR (Proposed Panelboard)														
CKT.NO	LOAD DESCRIPTION	NO. OF OUTLETS	VOLTAGE	TOTAL VA	AMP/CKT.	AMP./PHASE			CKT. PROTECTION		SIZE OF WIRE		SIZE OF CONDUIT	
						AB	BC	CA	AT	AF	mm <sup>2</sup>	TYPE	mm <sup>2</sup>	TYPE
1	Lighting Outlet	14	230	1400	6.09	6.09			15	50	3-2.0	THHN	20	PVC
2	Lighting Outlet	16	230	1600	6.96	6.96			15	50	3-2.0	THHN	20	PVC
3	Lighting Outlet	12	230	1200	5.22		5.22		15	50	3-2.0	THHN	20	PVC
4	Lighting Outlet	12	230	1200	5.22		5.22		15	50	3-2.0	THHN	20	PVC
5	Lighting Outlet	18	230	1800	7.83			7.83	15	50	3-2.0	THHN	20	PVC
6	Convenience Outlet	4	230	1440	6.26			6.26	20	50	3-3.5	THHN	20	PVC
7	Convenience Outlet	6	230	2160	9.39	9.39			20	50	3-3.5	THHN	20	PVC
8	Existing Load		230	1500	6.52	6.52			30	50	2-3.5	THHN	20	PVC
9	Existing Load		230	1500	6.52		6.52		60	50	3-5.5	THHN	20	PVC
10	Existing Load		230	1500	6.52		6.52		60	50	3-5.5	THHN	20	PVC
11	Existing Load		230	1500	6.52			6.52	30	50	3-3.5	THHN	20	PVC
12	Existing Load		230	1500	6.52			6.52	40	50	3-3.5	THHN	20	PVC
13	Existing Load		230	1500	6.52	6.52			40	50	3-5.5	THHN	20	PVC
14	Existing Load		230	1500	6.52	6.52			40	50	3-3.5	THHN	20	PVC
15	Existing Load		230	1500	6.52		6.52		40	50	3-3.5	THHN	20	PVC
16	Lighting Outlet	17	230	1700	7.39		7.39		15	50	3-2.0	THHN	20	PVC
17	Lighting Outlet	14	230	1400	6.09			6.09	15	50	3-2.0	THHN	20	PVC
18	Lighting Outlet	14	230	1400	6.09			6.09	40	50	3-2.0	THHN	20	PVC
19	Lighting Outlet	14	230	1400	6.09	6.09			40	50	3-2.0	THHN	20	PVC
20	Lighting Outlet	11	230	1100	4.78	4.78			40	50	3-2.0	THHN	20	PVC
21	Existing Load		230	1500	6.52				40	50	3-3.5	THHN	20	PVC
<b>Total</b>						<b>52.87</b>	<b>43.91</b>	<b>39.30</b>						

Line Current = (1.73) x 52.87 = 91.46 A

For Feeder Conductor = 1.25 x 91.46 A = 114.33 A  
Use 3 - 80mm<sup>2</sup> THHN cu.wire in 65mm PVC Pipe

For Feeder Protection Use 200AT,200AF, 3Phase 230V, 60Hz, MCCB Bolt on Type

**Note: Main line of panelboard and panelboard is existing**

