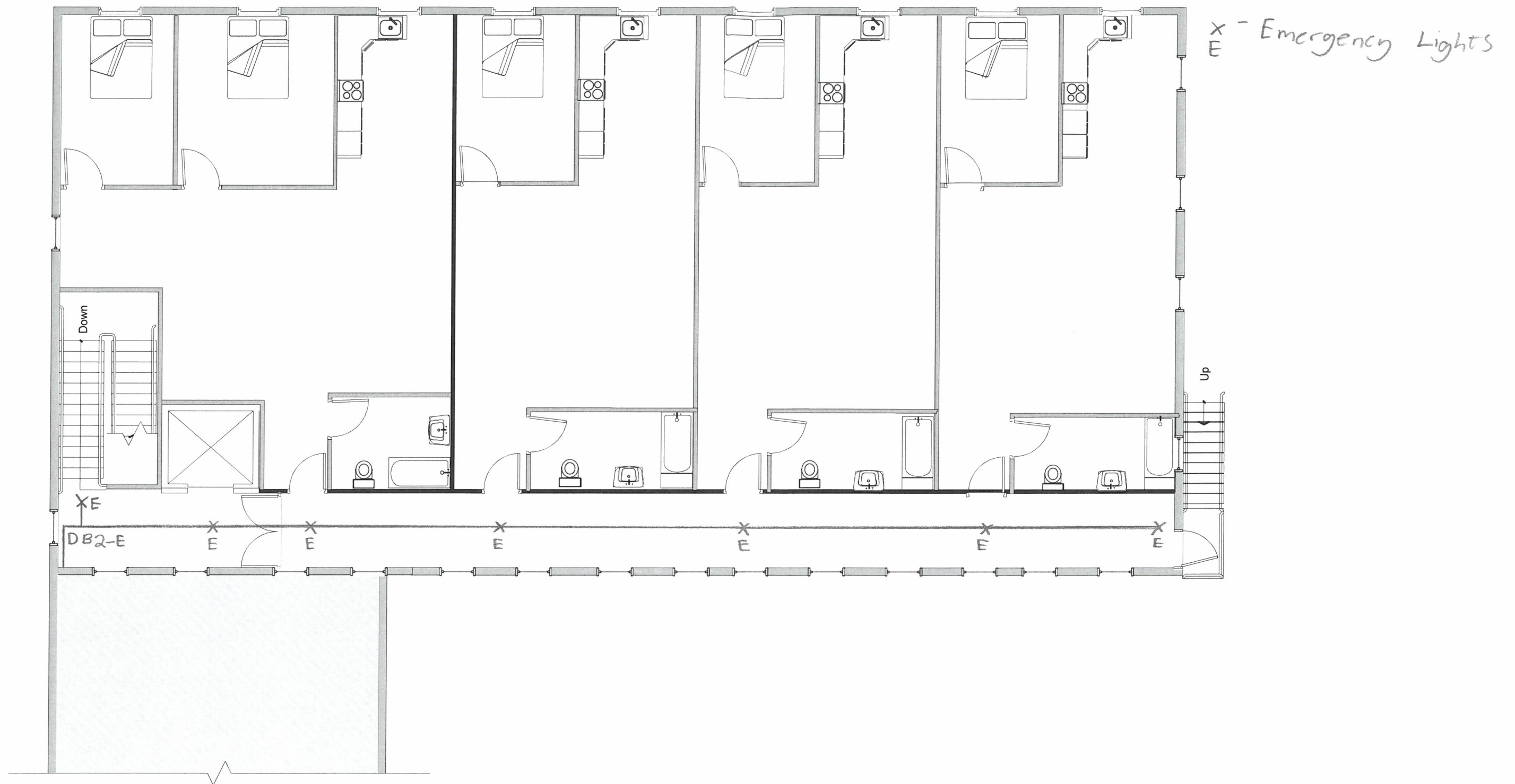
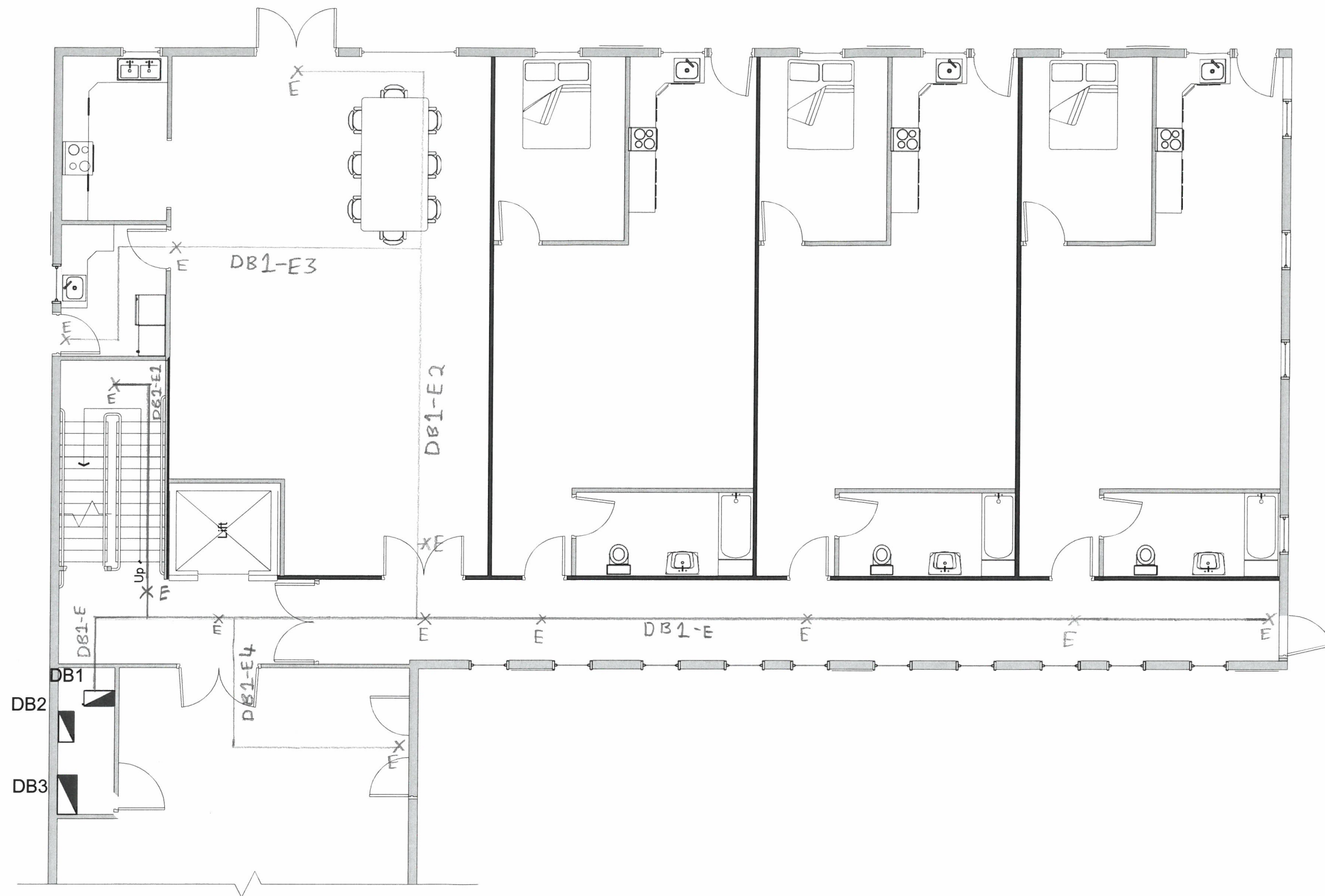


Bedroom Cable Calculations																	
	Device:	Power (W)	Voltage (V)		Design Current (I)	Cable Length (m)	MCB size (Amps)	Temp (°C)	Current Carrying Capacity Of Cable	Cable Size (mm)	Voltage Drop (V)	R1+R2	Max Resistance Of Circuit (Ohms)	Zs (Ohms)	Zn (Ohms)	If (Fault Current)	Disconnection Time (Sec)
Ground Floor Room 1:	Cooker:	4000	230		+IC14(0.81)	15.25	20	24	+H4(1.01*0.81)	2.5	+18*0.44/1000	19.51	+19.51*1.2*0.44/1000	+0.27	+N4+O4	+D4/P4	0.01
	Lighting:	500	230		+IC5(2/30)	25.25	3	24	+H5(1.01*0.81)	1	+44*H5*0.55/1000	36.2	+196.2*1.2*0.55/1000	+0.27	+N5+O5	+D5/P5	0.01
	Sockets:	n/a	230		16	34.875	16	24	+H6(1.02*0.82)	2.5	+18*H6/06/1000	19.51	+19.51*1.2*0.56/1000	+0.27	+N6+O6	+D6/P6	0.01
Grand Floor Room 2:	Cooker:	4000	230		+IC9(0.9)	15.25	20	24	+H9(1.01*0.81)	2.5	+18*0.9/09/1000	19.51	+19.51*1.2*0.9/1000	+0.27	+N9+O9	+D9/P9	0.01
	Lighting:	500	230		+IC10(2/30)	46.875	6	24	+H10(1.01*0.81)	1	+44*H10*0.55/1000	36.2	+196.2*1.2*0.55/1000	+0.27	+N10+O10	+D10/P10	0.01
	Sockets:	n/a	230		16	34.875	16	24	+H11(1.02*0.82)	2.5	+18*H11/011/1000	19.51	+19.51*1.2*0.11/1000	+0.27	+N11+O11	+D11/P11	0.01
Ground Floor Room 3:	Cooker:	4000	230		+IC14(0.81)	15.25	20	24	+H14(0.81*1.02)	2.5	+18*0.14*H14/1000	19.51	+19.51*1.2*0.14/1000	+0.27	+N14+O14	+D14/P14	0.01
	Lighting:	500	230		+IC15(2/30)	25.25	3	24	+H15(0.81*1.02)	1	+44*H15*0.55/1000	36.2	+196.2*1.2*0.55/1000	+0.27	+N15+O15	+D15/P15	0.01
	Sockets:	n/a	230		16	34.875	16	24	+H16(0.81*1.02)	2.5	+18*H16/016/1000	19.51	+19.51*1.2*0.16/1000	+0.27	+N16+O16	+D16/P16	0.01
First Floor Room 1 (Double Room):	Cooker:	4000	230		+IC10(0.9)	15.25	20	24	+H10(1.01*0.81)	2.5	+18*0.10*H10/1000	19.51	+19.51*1.2*0.10/1000	+0.27	+N10+O10	+D10/P10	0.01
	Lighting:	800	230		+IC20(0.20)	46.875	6	24	+H20(1.01*0.81)	1	+44*H20*0.55/1000	36.2	+196.2*1.2*0.55/1000	+0.27	+N20+O20	+D20/P20	0.01
	Sockets Radial 1:	n/a	230		16	23.875	16	24	+H21(1.02*0.82)	2.5	+18*H21/021/1000	19.51	+19.51*1.2*0.21/1000	+0.27	+N21+O21	+D21/P21	0.01
	Sockets Radial 2:	n/a	230		16	22.25	16	24	+H22(1.02*0.82)	2.5	+18*H22/022/1000	19.51	+19.51*1.2*0.22/1000	+0.27	+N22+O22	+D22/P22	0.01
First Floor Room 2:	Cooker:	4000	230		+IC25(0.25)	15.25	20	24	+H25(0.81*1.02)	2.5	+18*0.25*H25/1000	19.51	+19.51*1.2*0.25/1000	+0.27	+N25+O25	+D25/P25	0.01
	Lighting:	500	230		+IC26(2/30)	25.25	3	24	+H26(0.81*1.02)	1	+44*H26*0.55/1000	36.2	+196.2*1.2*0.55/1000	+0.27	+N26+O26	+D26/P26	0.01
	Sockets:	n/a	230		16	34.875	16	24	+H27(0.81*1.02)	2.5	+18*H27*0.57/1000	19.51	+19.51*1.2*0.57/1000	+0.27	+N27+O27	+D27/P27	0.01
First Floor Room 3:	Cooker:	4000	230		+IC30(0.30)	15.25	20	24	+H30(0.81*1.02)	2.5	+18*0.30*H30/1000	19.51	+19.51*1.2*0.30/1000	+0.27	+N30+O30	+D30/P30	0.01
	Lighting:	500	230		+IC31(2/30)	25.25	3	24	+H31(0.81*1.02)	1	+44*H31*0.53/1000	36.2	+196.2*1.2*0.53/1000	+0.27	+N31+O31	+D31/P31	0.01
	Sockets:	n/a	230		16	34.875	16	24	+H32(0.81*1.02)	2.5	+18*H32*0.53/1000	19.51	+19.51*1.2*0.53/1000	+0.27	+N32+O32	+D32/P32	0.01
First Floor Room 4:	Cooker:	4000	230		+IC35(0.35)	15.25	20	24	+H35(0.81*1.02)	2.5	+18*0.35*H35/1000	19.51	+19.51*1.2*0.35/1000	+0.27	+N35+O35	+D35/P35	0.01
	Lighting:	500	230		+IC36(2/30)	25.25	3	24	+H36(0.81*1.02)	1	+44*H36*0.56/1000	36.2	+196.2*1.2*0.56/1000	+0.27	+N36+O36	+D36/P36	0.01
	Sockets:	n/a	230		16	34.875	16	24	+H37(0.81*1.02)	2.5	+18*H37*0.57/1000	19.51	+19.51*1.2*0.57/1000	+0.27	+N37+O37	+D37/P37	0.01
Corridors:																	
Ground Floor Corridor:	Plugs:	n/a	230		+I16	25	20	28	+H42(1*0.82)	2.5	+18*0.42*H42/1000	19.51	+19.51*1*0.42/1000	+0.27	+N42+O42	+D42/P42	0.01
	Lighting:	11000	230		+IC43(2/30)	39.5	6	28	+H43(1*0.82)	1.5	+29*H43*0.43/1000	30.2	+190.2*1*0.43/1000	+0.27	+N43+O43	+D43/P43	0.01
	Emergency Lights:	26	230		+IC44(0.44)	75.375	3	28	+H44(1*0.82)	1	+44*H44*0.44/1000	36.2	+196.2*1.2*0.44/1000	+0.27	+N44+O44	+D44/P44	0.01
First Floor Corridor:	Plugs:	n/a	230		+I16	25	20	28	+H47(1*0.82)	2.5	+18*0.47*H47/1000	19.51	+19.51*1*0.47/1000	+0.27	+N47+O47	+D47/P47	0.01
	Lighting:	900	230		+IC48(2/30)	33.5	6	28	+H48(1*0.82)	1.5	+29*H48*0.48/1000	30.2	+190.2*1*0.48/1000	+0.27	+N48+O48	+D48/P48	0.01
	Emergency Lights:	14	230		+IC49(2/30)	35.625	3	28	+H49(1*0.82)	1	+44*H49*0.49	36.2	+196.2*1.2*0.49/1000	+0.27	+N49+O49	+D49/P49	0.01
Common Room																	
	Cooker:	4000	230		+IC10(0.9)	15.25	20	24	+H30(0.81*1.02)	2.5	+18*0.10*H30/1000	19.51	+19.51*1.2*0.10/1000	+0.27	+N30+O30	+D30/P30	0.01
	Lighting:	500	230		+IC11(2/30)	25.25	3	24	+H31(0.81*1.02)	1	+44*H31*0.53/1000	36.2	+196.2*1.2*0.53/1000	+0.27	+N31+O31	+D31/P31	0.01
	Sockets:	n/a	230		16	34.875	16	24	+H32(0.81*1.02)	2.5	+18*H32*0.53/1000	19.51	+19.51*1.2*0.53/1000	+0.27	+N32+O32	+D32/P32	0.01
3 Phase Circuits																	
	Device:	Power (W)	Voltage (V)	Phase Angle:	Design Current (I)	Cable Length (m)	MCB size (Amps)	Temp (°C)	Current Carrying Capacity Of Cable	Cable Size (mm)	Voltage Drop (V)	R1+R2	Max Resistance Of Circuit (Ohms)	Zs (Ohms)	Zn (Ohms)	If (Fault Current)	Disconnection Time
	Life:	6000	400	+C05(120)	+C63(0.0*0.51)*415*0.88*F631	10.625	16	30	+H61(0.82)	2.5	+18*0.61*H61/1000	19.51	+19.51*1*0.61/1000+0.27	+0.27	+N61+O61	+D61/P61	0.01
	Oven:	6400	400	n/a	+C62(0.0*0.51)*4151	22.75	16	30	+H62(0.82)	2.5	+18*0.62*H62/1000	19.51	+19.51*1*0.62/1000+0.27	+0.27	+N62+O62	+D62/P62	0.01
	Cooker:	7000	400	n/a	+C63(0.0*0.51)*4151	30.375	16	30	+H63(0.82)	2.5	+18*0.63*H63/1000	19.51	+19.51*1*0.63/1000+0.27	+0.27	+N63+O63	+D63/P63	0.01



Sheltered accommodation First Floor
Scale 1:125

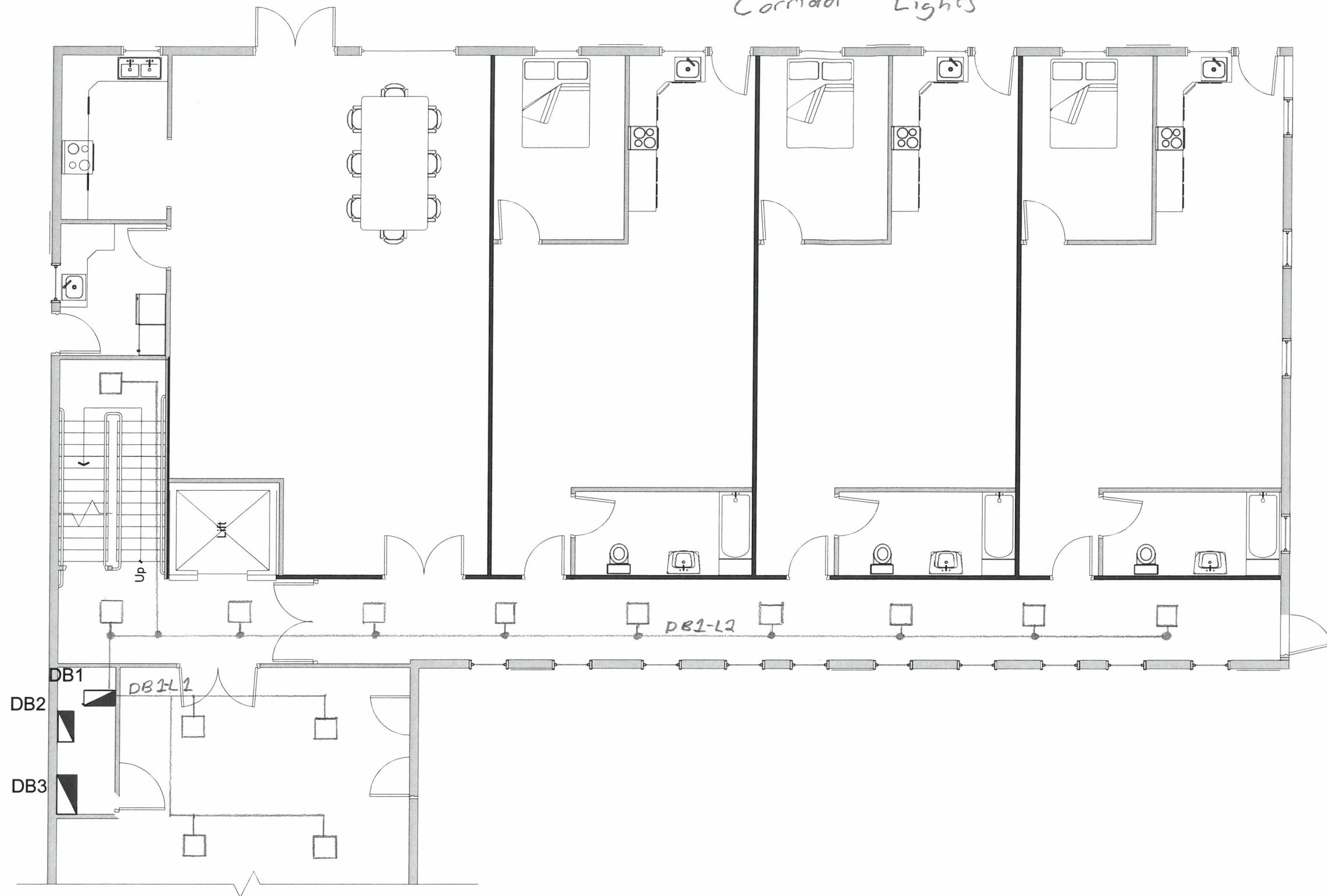


X - Emergency Lights
E - Emergency Lights

Sheltered accommodation Ground Floor
Scale 1:125

Corridor Lights

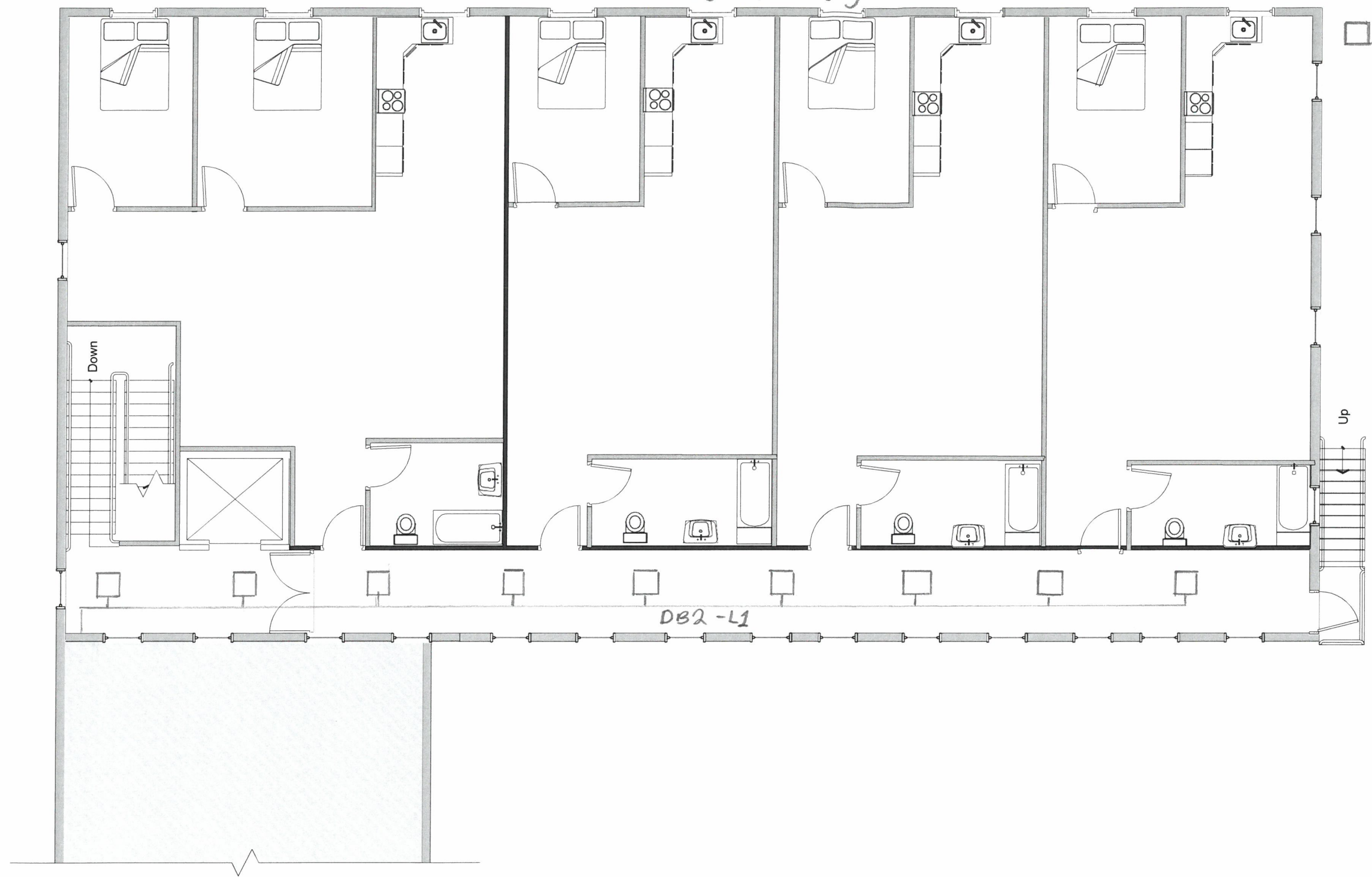
□ - Panel Light



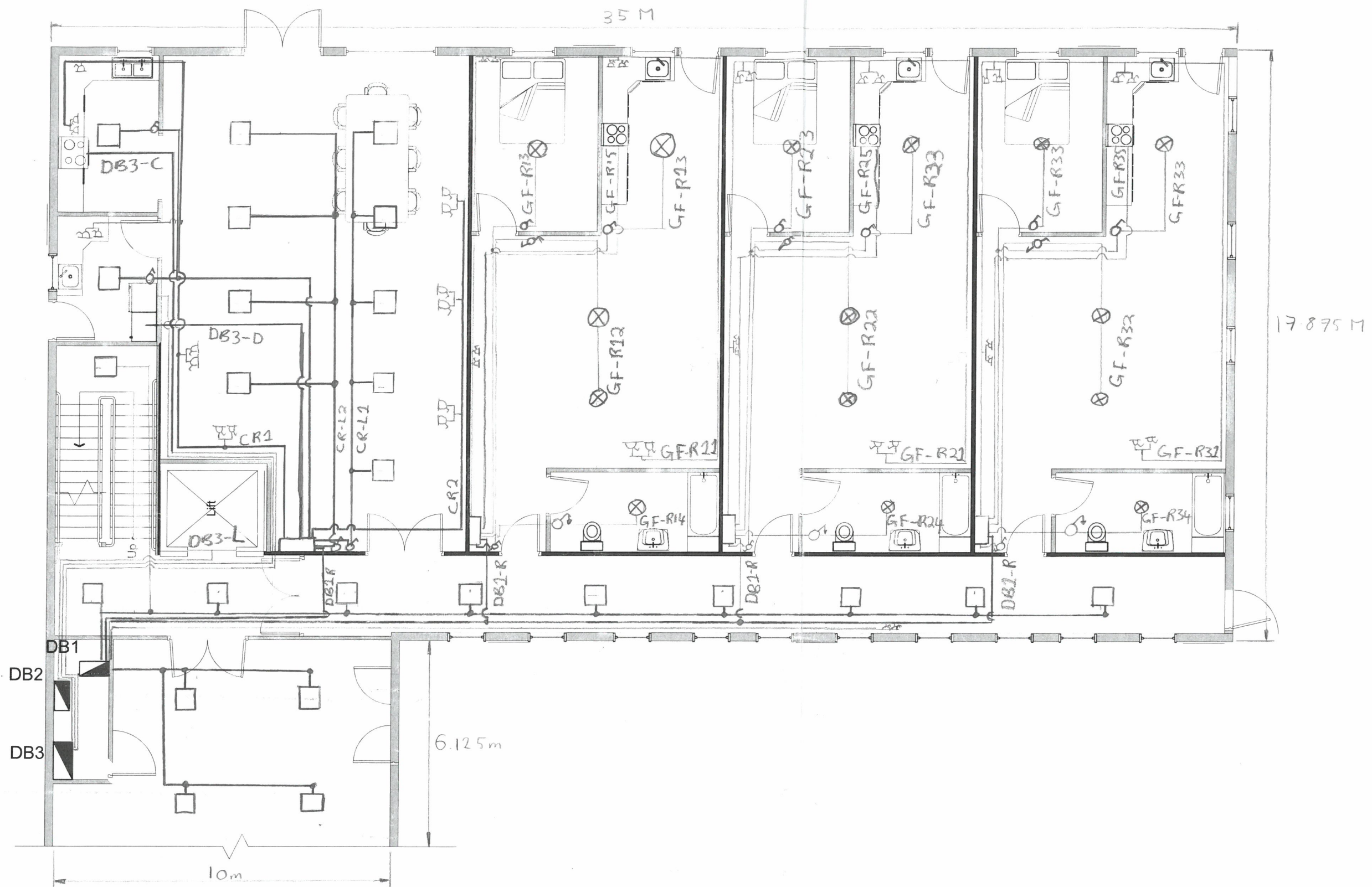
Sheltered accommodation Ground Floor
Scale 1:125

Corridor Lights

□ - Pannel Light



Sheltered accommodation First Floor
Scale 1:125



Sheltered accommodation Ground Floor
Scale 1:125