

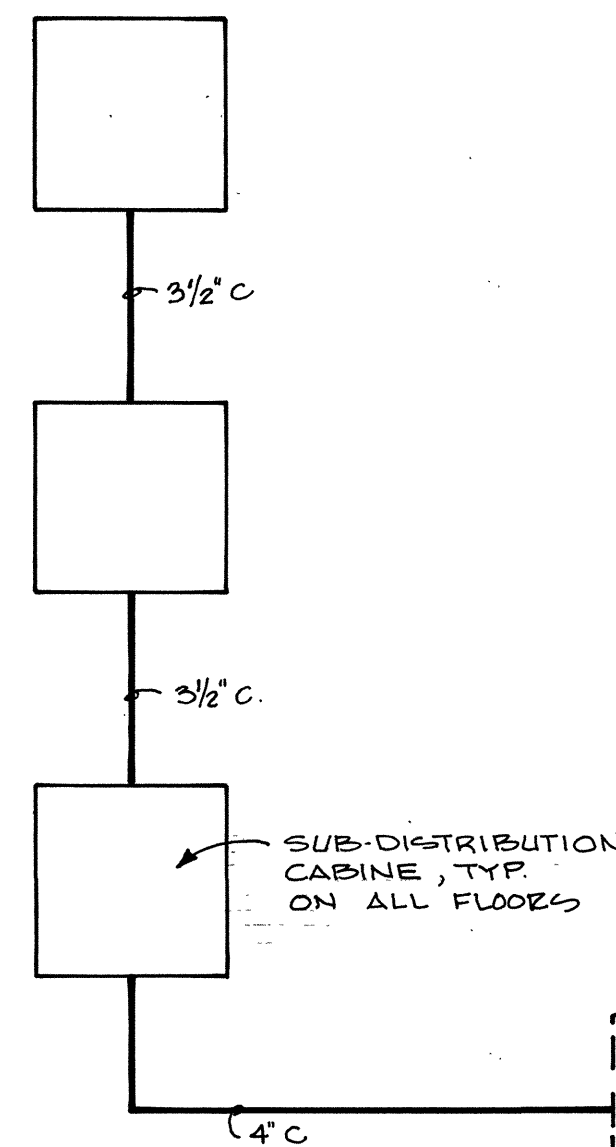
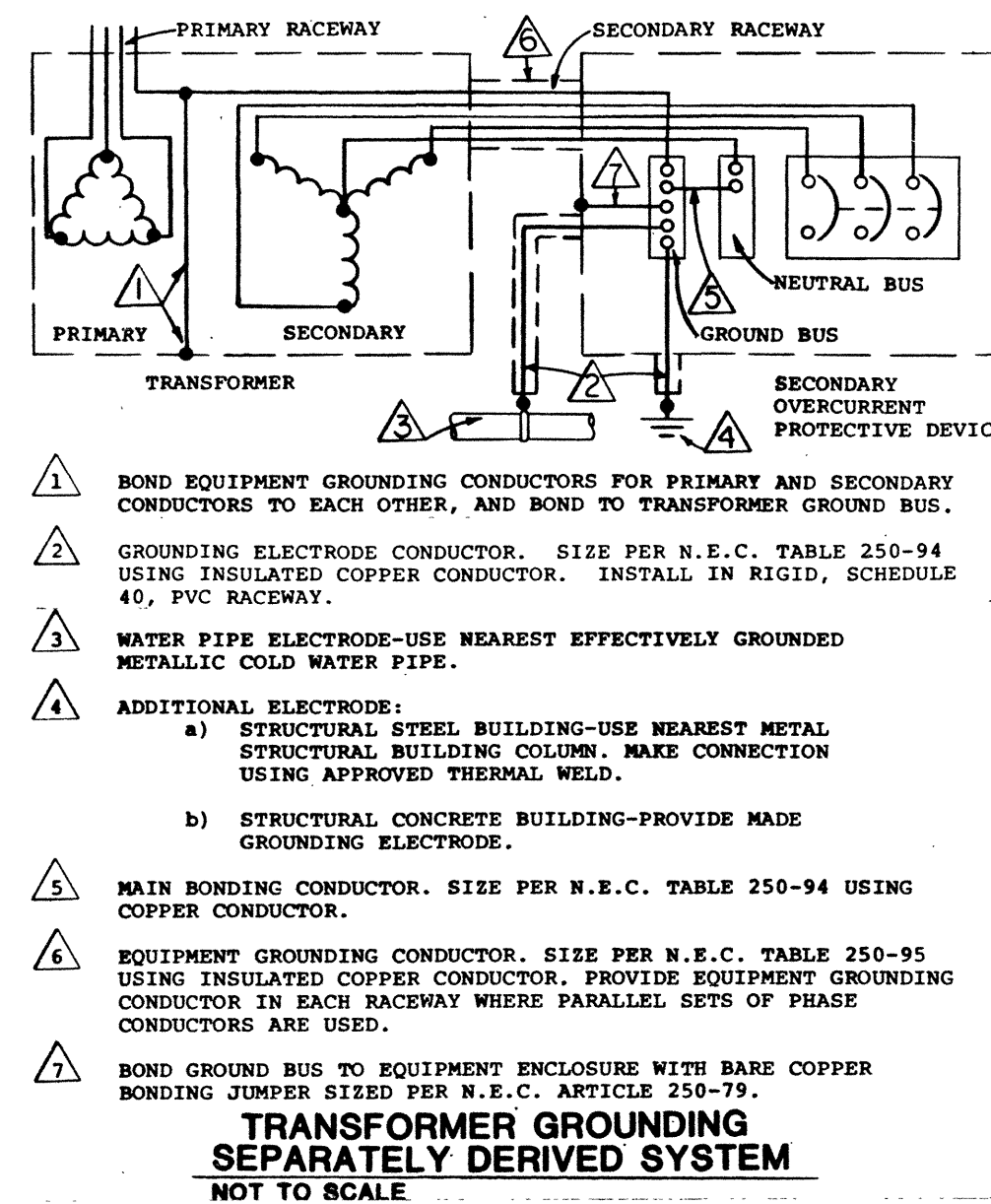
ELECTRICAL SYMBOLS

ALL SYMBOLS NOT NECESSARILY USED

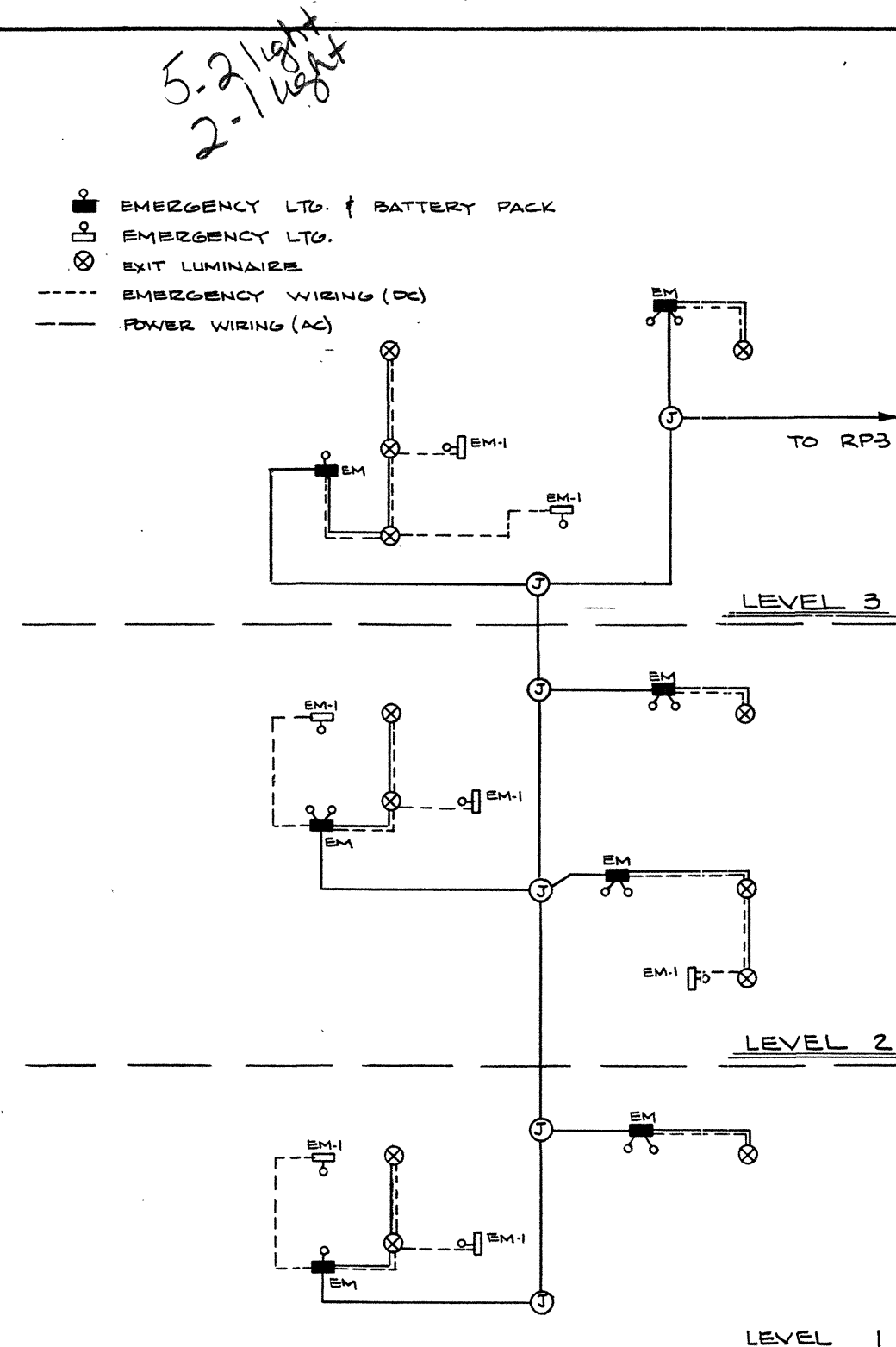
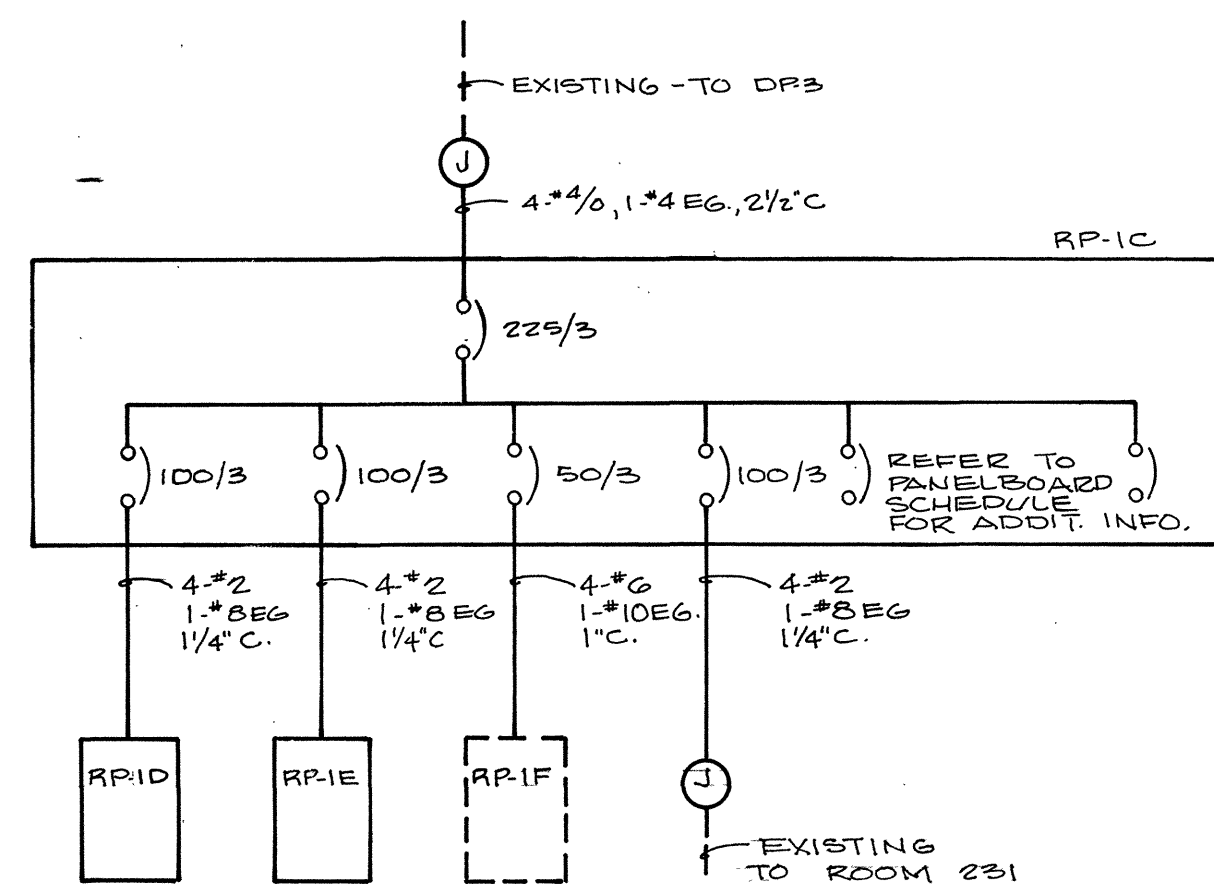
FA	LIGHTING FIXTURE, FLUORESCENT, CEILING MOUNTED	20	DUPLEX RECEPTACLE OUTLET, 20 AMPERE, 125 VOLT, 12" AP
FB	LIGHTING FIXTURE, FLUORESCENT, WALL MOUNTED	20	DUPLEX RECEPTACLE OUTLET, 20 AMPERE, 125 VOLT, FLUSH FLOOR
FC	LIGHTING FIXTURE, FLUORESCENT, STRIP, CEILING MOUNTED	20	SPECIAL PURPOSE RECEPTACLE OUTLET. DEFINITION OF SUBSCRIPTS:
HA	LIGHTING FIXTURE, H.I.D., ROUND OR SQUARE, CEILING MOUNTED	20	A - 20 AMPERE, COMBINATION 125/250 VOLT, DUPLEX
HB	LIGHTING FIXTURE, H.I.D., ROUND OR SQUARE, WALL MOUNTED	20	B - 20 AMPERE, 250 VOLT, DUPLEX
HC	LIGHTING FIXTURE, H.I.D., ROUND OR SQUARE, WALL MOUNTED	20	C - 30 AMPERE, 125/250 VOLT, SINGLE
HD	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, CEILING MOUNTED	20	D - 50 AMPERE, 125/250 VOLT, SINGLE
HE	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	E - EMERGENCY CIRCUIT RECEPTACLE
HF	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	F - SHOP RECEPTACLE
HA	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	G - HOSPITAL GRADE RECEPTACLE
HB	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	TELEPHONE OUTLET AND/OR RECEPTACLE OUTLET AS INDICATED, REFER TO SPECIFICATIONS
HC	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	RECEPTACLE, PLUG-IN STRIP, PREWIRED, 2-CIRCUIT, 3-WIRE, LENGTH AND MOUNTING HEIGHT AS INDICATED. SUBSCRIPTS "I.G." INDICATES SINGLE CIRCUIT, 3-WIRE, ISOLATED GROUND TYPE
HD	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	20-AMPERE, 277 VOLT, SINGLE POLE A.C. SWITCH, 4"-0" AP. DEFINITION OF SUBSCRIPTS:
HE	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	2 - TWO POLE SWITCH
HF	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	3 - THREE WAY SWITCH
HA	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	4 - FOUR WAY SWITCH
HB	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	5 - KEY OPERATED
HC	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	6 - NEON PILOT LIGHT
HD	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	7 - FRACTIONAL HORSEPOWER, MANUAL MOTOR STARTER, WITH THERMAL OVERLOADS
HE	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	WP - WEATHERPROOF
HF	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	XP - EXPLOSIONPROOF
HA	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	QTY OF LOWER CASE LETTERS INDICATES QUANTITY OF GANGED SWITCHES
HB	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	INDICATION OF GANGED DEVICES
HC	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	DIMMER SWITCH, 120 VOLT, FLUSH MOUNTED, 4"-0" AP. DEFINITION OF SUBSCRIPTS:
HD	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	A - 600 WATT
HE	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	B - 1000 WATT
HF	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	C - 1000 WATT, 3-WAY
HA	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	D - 1500 WATT
HB	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	E - 2000 WATT
HC	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	TIME SWITCH CONTROL
HD	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	TELEPHONE OUTLET, UTILITY COMPANY SYSTEM, 12" AP. SUBSCRIPT "W" INDICATES WALL MOUNTED OUTLET 4"-0" AP.
HE	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	TELEPHONE OUTLET, UTILITY COMPANY SYSTEM, FLUSH FLOOR
HF	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	TELEPHONE OUTLET, INTERCOMMUNICATION SYSTEM, 12" AP. SUBSCRIPT "W" INDICATES WALL MOUNTED OUTLET 4"-0" AP.
HA	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	TELEPHONE OUTLET, INTERCOMMUNICATION SYSTEM, FLUSH FLOOR
HB	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	MOTOR CONNECTION, NUMERAL INDICATES ITEM NUMBER ON "ELECTRIC EQUIPMENT AND CONTROL SCHEDULE"
HC	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	LOCATION OF ONE OR MORE MOTOR CONTROL DEVICES AS SCHEDULED ON "ELECTRIC EQUIPMENT AND CONTROL SCHEDULE." NUMBER REFERS TO MOTOR CONTROL.
HD	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	CONDUIT TURNED UP
HE	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	CONDUIT TURNED DOWN
HF	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	NONFUSED DISCONNECT SWITCH, VOLTAGE RATING TO MATCH EQUIPMENT SERVED, AMPERE RATING AS INDICATED, 4"-0" AP
HA	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	FUSED DISCONNECT SWITCH, VOLTAGE RATING TO MATCH EQUIPMENT SERVED, AMPERE RATING AS INDICATED, 4"-0" AP
HB	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	MAGNETIC MOTOR STARTER, VOLTAGE RATING AND NEMA SIZE TO MATCH MOTOR SERVED, MINIMUM SIZE 1, 4"-0" AP
HC	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	COMBINATION MAGNETIC MOTOR STARTER/CIRCUIT BREAKER DISCONNECT SWITCH, VOLTAGE RATING AND NEMA SIZE TO MATCH MOTOR SERVED, MINIMUM SIZE 1, CIRCUIT BREAKER TRIP RATING AS INDICATED, 4"-0" AP
HD	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	INDICATES EXISTING WIRING OR EQUIPMENT
HE	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	INDICATES EXISTING WIRING OR EQUIPMENT TO BE REMOVED
HF	LIGHTING FIXTURE, INCANDESCENT, ROUND OR SQUARE, WALL MOUNTED	20	INDICATES NEW WIRING OR EQUIPMENT

PANELBOARD SCHEDULE - LEVEL 1, EXISTING AREA

PANEL	TYPE	VOLTAGE RATING			MAIN AMPERE RATING			KVAO (RMS SYM)	MOUNT	BRANCH CIRCUIT DEVICES						NOTES
		VOLT	PHASE	WIRE	MLO	MCB	MPS			QUANTITY			FRAME/ SWITCH SIZE	TRIP/ FUSE RATING	POLES	
										ACTIVE	SPARE	SPACE				
RP-1C	X	208Y/120	3	4		225	22	X	12	5	4	QOB	20	1		
									1			QOB	20	3		
									3			Q1	100	3		
RP-1D	X	208Y/120	3	4	100		22	X	4	4	4	QOB	20	1		
									6			QOB	20	3		
RP-1E	X	208Y/120	3	4	100		22	X	5	7	10	QOB	20	1		
									1			QOB	20	2		
									1			QOB	20	3		
RP-1F	X	208Y/120	3	4	100		22	X	3	3		QOB	20	1		EXISTING PANEL 30/3 C.B.'S ARE EXIST.
									2			QOB	20	3		



TELEPHONE RISER DIAGRAM NOT TO SCALE



EXIT/EMERGENCY LIGHTING SCHEMATIC DIAGRAM NOT TO SCALE

ELECTRIC EQUIPMENT AND CONTROL SCHEDULE

EQUIPMENT					SUPPLY		CONTROL DEVICES MOUNTED IN ROOMS AS SCHEDULED AND AS SHOWN ON PLANS BY 																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
ITEM NUMBER	NAME	ROOM LOCATION	PHASE	VOLT	PAUSE OR CIRCUIT BREAKER	POWER WIRING TO CONTROL UNIT	POWER WIRING TO EQUIPMENT	REFERENCE	DISCONNECT	MANUAL MOTOR STARTER	MANUAL MOTOR TWO SPEED	COMBINATION MAGNETIC STARTER	COMBINATION TWO POLE DISCONNECT STARTER	REDUCED VOLTAGE MAGNETIC STARTER	CONTROL UNIT	CAPACITOR	REACTOR	ELECTRIC TRANSFORMER	LOW VOLTAGE TRANSFORMER																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									

ELECTRIC EQUIPMENT AND CONTROL SCHEDULE SYMBOLS & NOTES

- ITEM NUMBER IS USED TO IDENTIFY EQUIPMENT & ASSOCIATED CONTROL DEVICES ON PLANS.
- ALL CONTROL DEVICES MOUNTED BY ELECTRIC CONTRACTOR UNLESS OTHERWISE NOTED.
- ALL CONTROL DEVICES SURFACE MOUNTED UNLESS OTHERWISE NOTED.
- △ ITEM NUMBER IS USED TO IDENTIFY EQUIPMENT & ASSOCIATED CONTROL DEVICES ON PLANS.
- * PROVIDED BY ELECTRIC CONTRACTOR.
- MOUNTED BY OTHERS.
- + FLUSH MOUNTED.
- A. U. AT UNIT
- ALL CONTROL DEVICES FURNISHED BY OTHERS UNLESS OTHERWISE NOTED.
- ALL CONTROL DEVICES MOUNTED BY ELECTRIC CONTRACTOR UNLESS OTHERWISE NOTED.
- ALL CONTROL DEVICES SURFACE MOUNTED UNLESS OTHERWISE NOTED.

1. MOTORS 5, 7 & 10 POWERED FROM SAME POWER CIRCUIT.
2. EXISTING COMPUTER POWER AND CONTROL WIRING TO BE CIRCUITED TO NEW PANEL.
3. MOTORS 12, 13 & 14 POWERED FROM SAME POWER CIRCUIT.
4. OWNER SHALL SUPPLY POWER CONNECTIONS FROM DISCONNECT TO EQUIPMENT.
5. CONNECT TO EXISTING MOTOR CONTROL CENTER ON LEVEL #3. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS.

IT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER AN ITEM ON THIS DOCUMENT IN ANY WAY.

HOLT
Hoffman O'Brien
Levitch & Taube, P.C.
Architects, Planners, Graphic
and Interior Designers
119 West Buffalo Street
Ithaca, New York 14850

REGISTERED ARCHITECT
STATE OF NEW YORK
No. 012006
JAMES J. HOLT

R+W
Robson & Woese, Inc.
Consulting Engineers
2230 Penfield Road
Penfield, New York

STATE OF NEW YORK
LICENSED PROFESSIONAL ENGINEER
No. 130
JAMES J. HOLT

Addition to Wilson Laboratory
Cornell High Energy Synchrotron Source and Laboratory for Nuclear Studies
Cornell University, Ithaca, New York

Scale: "AS NOTED"
Date: 11-9-84
Project No: 83054
Drawn by: WEB

SYMBOLS
AND
DETAILS