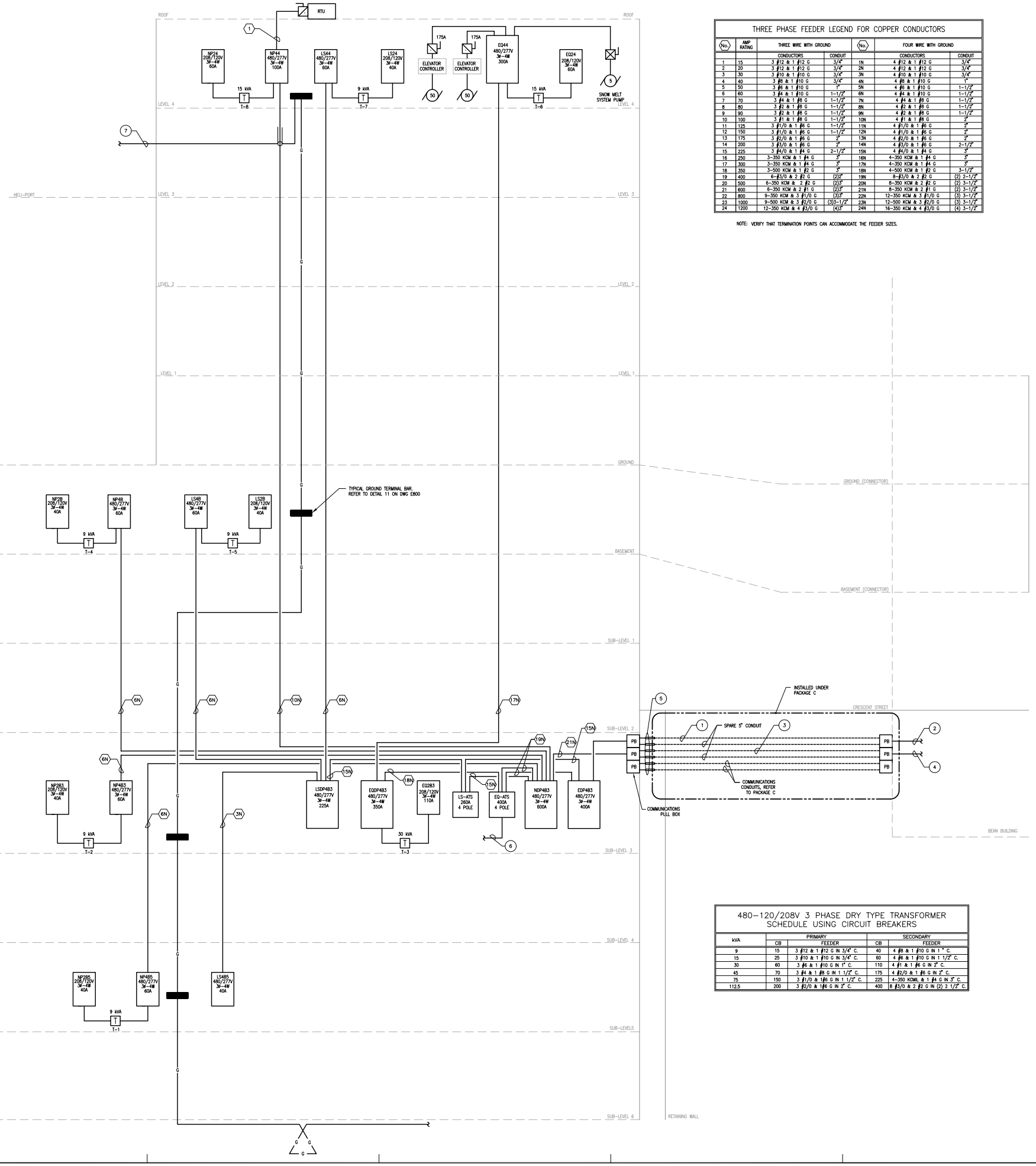
MOTOR DATA SCHEDULE 460 VOLT 3 PHASE							
HORSEPOWER	FULL LOAD AMPS	FEEDER	GROUND	CONDUIT	OVERCURRENT PROTECTION DEVICE (AMPS) (NOTE 2)	STARTER (NEMA SIZE)	DISCONNECT (AMPS)
0.5	1.10	3 #12 & 1 #12 G.	1 #12 G.	3/4"	15	00	30
0.75	1.60	3 #12 & 1 #12 G.	1 #12 G.	3/4"	15	00	30
1	2.10	3 #12 G.	1 #12 G.	3/4"	15	00	30
1.5	3.00	3 #12 G.	1 #12 G.	3/4"	15	00	30
2	3.40	3 #12 G.	1 #12 G.	3/4"	15	00	30
3	4.80	3 #12 G.	1 #12 G.	3/4"	15	0	30
5	7.60	3 #10 G.	1 #10 G.	3/4"	25	0	30
7.5	11.00	3 #10 G.	1 #10 G.	3/4"	30	1	30
10	14.00	3 #10 G.	1 #10 G.	3/4"	35	1	30
15	21.00	3 #8 G.	1 #10 G.	3/4"	60	2	40
20	27.00	3 #8 G.	1 #8 G.	3/4"	70	2	40
25	34.00	3 #6 G.	1 #8 G.	1"	90	2	100
30	40.00	3 #6 G.	1 #8 G.	1"	100	3	100
40	52.00	3 #4 G.	1 #6 G.	1"	150	3	100
50	65.00	3 #3 G.	1 #4 G.	1 1/2"	175	3	200
60	77.00	3 #1 G.	1 #4 G.	1 1/2"	200	4	200
75	96.00	3 #1/0 G.	1 #4 G.	1 1/2"	250	4	200
100	124.00	3 #3/0 G.	1 #4 G.	1 1/2"	350	4	400
125	156.00	3 #5/0 G.	1 #2 G.	2"	400	5	400
150	180.00	3 #4/0 G.	1 #2 G.	2"	450	5	600
200	242.00	3 - 350 KCMIL	1 #2 G.	2 1/2"	600	5	600

NOTES:
1. DISCONNECT SIZES ARE BASED ON HORSEPOWER RATINGS OF HEAVY DUTY SWITCHES.
2. ALL BREAKERS RATED 200A AND GREATER MUST HAVE ADJUSTABLE INSTANTANEOUS SETTINGS. ALL BREAKERS RATED 400A AND GREATER MUST HAVE ELECTRONIC TRIP UNITS WITH ADJUSTABLE LONG-TIME, SHORT-TIME AND INSTANTANEOUS.



THREE PHASE FEEDER LEGEND FOR COPPER CONDUCTORS					
No.	AMP RATING	THREE WIRE WITH GROUND		No.	FOUR WIRE WITH GROUND
		CONDUCTORS	CONDUIT		CONDUCTORS	CONDUIT
1	15	3 #12 & 1 #12 G	3/4"	1N	4 #12 & 1 #12 G	3/4"
2	20	3 #12 & 1 #12 G	3/4"	2N	4 #12 & 1 #12 G	3/4"
3	30	3 #10 & 1 #10 G	3/4"	3N	4 #10 & 1 #10 G	3/4"
4	40	3 #8 & 1 #10 G	3/4"	4N	4 #8 & 1 #10 G	1"
5	50	3 #6 & 1 #10 G	1"	5N	4 #6 & 1 #10 G	1-1/2"
6	60	3 #4 & 1 #10 G	1-1/2"	6N	4 #4 & 1 #10 G	1-1/2"
7	70	3 #4 & 1 #8 G	1-1/2"	7N	4 #4 & 1 #8 G	1-1/2"
8	80	3 #2 & 1 #8 G	1-1/2"	8N	4 #2 & 1 #8 G	1-1/2"
9	90	3 #2 & 1 #6 G	1-1/2"	9N	4 #2 & 1 #8 G	1-1/2"
10	100	3 #1 & 1 #6 G	1-1/2"	10N	4 #1 & 1 #6 G	2"
11	125	3 #1/0 & 1 #6 G	1-1/2"	11N	4 #1/0 & 1 #6 G	2"
12	150	3 #1/0 & 1 #6 G	1-1/2"	12N	4 #1/0 & 1 #6 G	2"
13	175	3 #2/0 & 1 #6 G	2"	13N	4 #2/0 & 1 #6 G	2"
14	200	3 #3/0 & 1 #6 G	2"	14N	4 #3/0 & 1 #6 G	2-1/2"
15	225	3 #4/0 & 1 #4 G	2-1/2"	15N	4 #4/0 & 1 #4 G	3"
16	250	3-350 KCM & 1 #4 G	3"	16N	4-350 KCM & 1 #4 G	3"
17	300	3-350 KCM & 1 #4 G	3"	17N	4-350 KCM & 1 #4 G	3"
18	350	3-500 KCM & 1 #2 G	3"	18N	4-500 KCM & 1 #2 G	3-1/2"
19	400	6-#3/0 & 2 #2 G	(2)3"	19N	8-#3/0 & 2 #2 G	(2) 2-1/2"
20	500	6-350 KCM & 2 #2 G	(2)3"	20N	8-350 KCM & 2 #2 G	(2) 3-1/2"
21	600	6-350 KCM & 2 #1 G	(2)3"	21N	8-350 KCM & 2 #1 G	(2) 3-1/2"
22	800	9-350 KCM & 3 #1/0 G	(3)3"	22N	12-350 KCM & 3 #1/0 G	(3) 3-1/2"
23	1000	9-500 KCM & 3 #2/0 G	(3)3-1/2"	23N	12-500 KCM & 3 #2/0 G	(3) 3-1/2"
24	1200	12-350 KCM & 4 #3/0 G	(4)3"	24N	16-350 KCM & 4 #3/0 G	(4) 3-1/2"

NOTE: VERIFY THAT TERMINATION POINTS CAN ACCOMMODATE THE FEEDER SIZES.

480-120/208V 3 PHASE DRY TYPE TRANSFORMER SCHEDULE USING CIRCUIT BREAKERS				
kVA	PRIMARY		SECONDARY	
	CB	FEEDER	CB	FEEDER
9	15	3 #12 & 1 #12 G IN 3/4" C.	40	4 #8 & 1 #10 G IN 1 " C.
15	25	3 #10 & 1 #10 G IN 3/4" C.	60	4 #6 & 1 #10 G IN 1 1/2" C.
30	40	3 #6 & 1 #10 G IN 1" C.	110	4 #1 & 1 #6 G IN 2" C.
45	70	3 #4 & 1 #8 G IN 1 1/2" C.	175	4 #2/0 & 1 #6 G IN 2" C.
75	150	3 #1/0 & 1#6 G IN 1 1/2" C.	225	4-350 KCMIL & 1 #4 G IN 3" C.
112.5	200	3 #2/0 & 1#6 G IN 2" C.	400	8 #3/0 & 2 #2 G IN (2) 2 1/2" C.

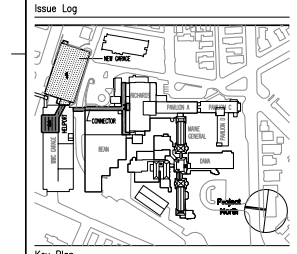
General Notes:

DRAWING NOTES:

1. FURNISH AND INSTALL (8) #3/0 & (2) #2G IN 5" CONDUIT, INSTALLED UNDER PACKAGE C.
2. FURNISH AND INSTALL (8) #3/0 & (2) #2G IN 3 1/2" CONDUIT TO A NEW 400A, 3P BREAKER IN EXISTING EMERGENCY DISTRIBUTION PANEL "_____" LOCATED IN THE BEAN BUILDING GENERATOR ROOM.
3. FURNISH AND INSTALL (8) #250 KCMIL & (2) #1G IN 5" CONDUIT, INSTALLED UNDER PACKAGE C.
4. FURNISH AND INSTALL (8) #350 KCMIL & (2) #1G IN 5" CONDUIT TO A NEW 600, 3P BREAKER IN BEAN BUILDING NORMAL SWITCHBOARD "MMC".
5. FURNISH AND INSTALL (6) 5" CONDUITS AND EXPANSION FITTINGS FROM 5" CONDUITS INSTALLED UNDER PACKAGE C TO NEW PULL BOXES IN THE GARAGE ELECTRIC ROOM. FITTINGS SHALL BE DEFLECTION/EXPANSION TYPE FOR RIGID METAL CONDUIT AND SHALL PROVIDE FOR 8" MINIMUM LATERAL MOVEMENT AND 30° DEFLECTION IN ANY ANGLE. COORDINATE INSTALLATION OF EXPANSION FITTINGS WITHIN VOID BETWEEN RETAINING WALL AND GARAGE.
6. FURNISH AND INSTALL COMMUNICATIONS WIRING TO ELEVATOR CONTROLLERS. WIRING SHALL BE PER ELEVATOR MANUFACTURER'S REQUIREMENTS, RUN IN CONDUIT.
7. BOND TO HELIPAD STRUCTURE.

MARK	ISSUE DATE	DESCRIPTION
PERMIT	09/16/04	PERMIT SET
BID	08/26/04	BID SET

Issue Log



Key Plan

TRO
Architecture
Planning
Engineering
Interior Design
The Ritchie Organization
83 Bridge Street
Newton, MA 02465-1134
617-558-9400

Maine Medical Center
Pkg F - Garage / Vault / Conn / Heliport
Portland, ME
MMC Project No. 21845

Drawing Title
ELECTRICAL - GARAGE POWER RISER DIAGRAM

0' 0 0 0

Commission No.	4678	Date Issued	08/26/04
Scale	NTS	Sheet Number	PKG-F
Drawn By	K.G.		E603
Approved By	D.P.		
Filename	4678E603		

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