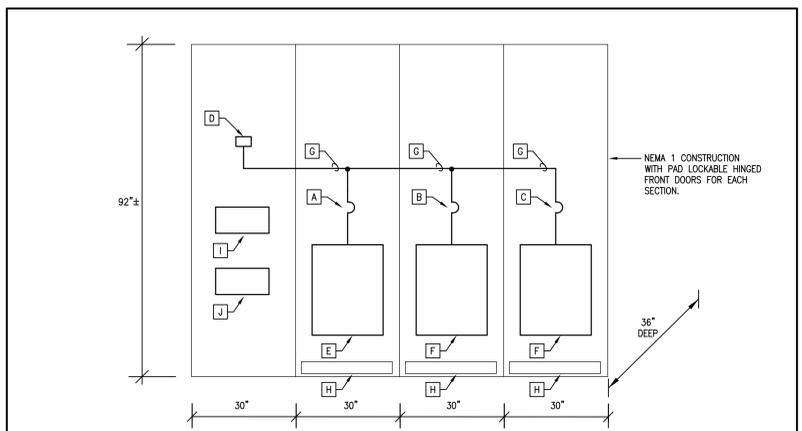


A  
 three inches = one foot  
 B  
 one and one half inches = one foot  
 C  
 one inch = one foot  
 D  
 three quarters inch = one foot  
 E  
 one half inch = one foot  
 F  
 three eighths inch = one foot  
 G  
 one quarter inch = one foot  
 H  
 one eighth inch = one foot  
 I  
 one sixteenth inch = one foot  
 J  
 one thirty second inch = one foot



**PORTABLE CHILLER QUICK CONNECT SWITCHBOARD (PCQC)**  
NOT TO SCALE

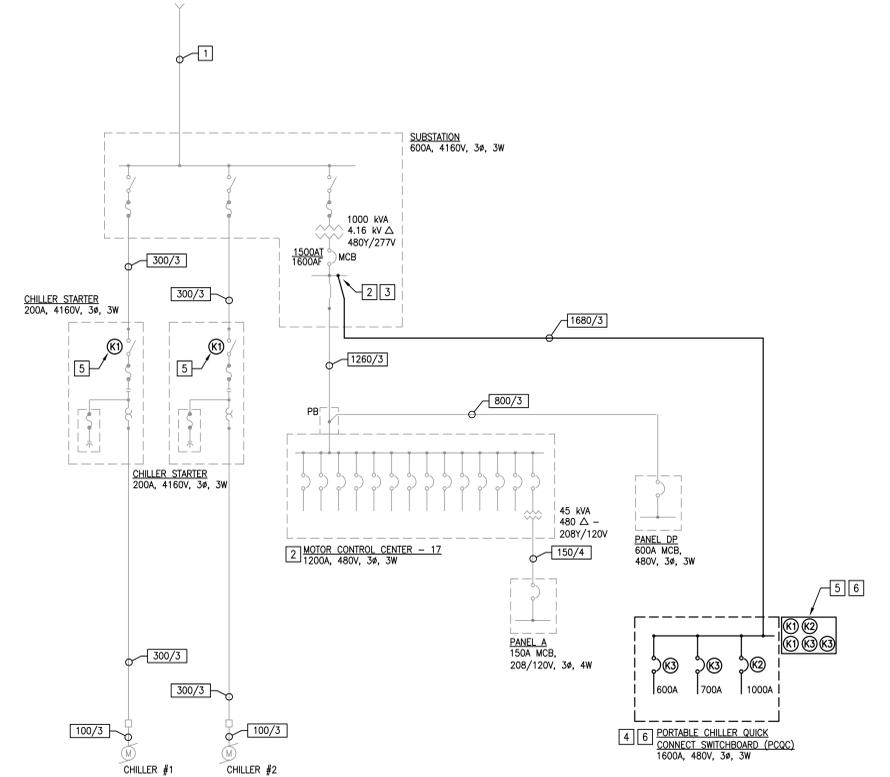
- A 3P, 1000A FRAME, 1000A TRIP MOLDED CASE, 100% RATED, 480V, 50,000 AIC, STATIONARY MOUNTED CIRCUIT BREAKER WITH ADJUSTABLE, SOLID STATE, LSI DIGITAL TRIP UNIT.
- B 3P, 800A FRAME, 700A TRIP MOLDED CASE, 100% RATED, 480V, 50,000 AIC, STATIONARY MOUNTED CIRCUIT BREAKER WITH ADJUSTABLE, SOLID STATE, LSI DIGITAL TRIP UNIT.
- C 3P, 800A FRAME, 600A TRIP MOLDED CASE, 100% RATED, 480V, 50,000 AIC, STATIONARY MOUNTED CIRCUIT BREAKER WITH ADJUSTABLE, SOLID STATE, LSI DIGITAL TRIP UNIT.
- D SUFFICIENT QUANTITY OF NEMA 2-HOLE COMPRESSION STYLE COPPER LONG BARRELS TERMINALS FOR CABLE CONNECTION BY CONTRACTOR.
- E 1000A CAPACITY, 3ø, 3W + GND, 480V QUICK CONNECT CAMLOCK COUPLINGS (MINIMUM OF FOUR PER PHASE) ON FACE OF PANEL, AS WELL AS, MECHANICAL STYLE LUGS FOR CABLE CONNECTIONS WITH BUSSED RUN BACKS TO LOADSIDE OF BREAKER.
- F 800A CAPACITY, 3ø, 3W + GND, 480V QUICK CONNECT CAMLOCK COUPLINGS (MINIMUM OF THREE PER PHASE) ON FACE OF PANEL, AS WELL AS, MECHANICAL STYLE LUGS FOR CABLE CONNECTIONS WITH BUSSED RUN BACKS TO LOADSIDE OF BREAKER.
- G 1600A, 3ø, 3W + GND, 480V, 50,000 AIC BRACING, COPPER (SILVER PLATED) MAIN BUS.
- H HORIZONTAL (TOP) PIANO HINGED ACCESS PLATE IN EACH SECTION'S DOOR TO ALLOW CABLE ENTRY AND ACCESS TO MECHANICAL TYPE OR COUPLING TYPE CONNECTORS.
- I KEY INTERLOCK SYSTEM (APARTMENT STYLE LOCK) TO PREVENT OPERATION OF TWO EXISTING AND THE PORTABLE CHILLER SIMULTANEOUSLY.
- J OPERATIONAL INSTRUCTION PLACARD (ENGRAVED NAMEPLATE).

**DRAWING NOTES**

- UTILITY TRANSFORMER, EXTERIOR DUCTBANK AND SERVICE ENTRANCE CABLES ARE ALL EXISTING TO REMAIN INTACT.
- EXISTING MOTOR CONTROL CENTER - SCHEDULE OUTAGE IN CONJUNCTION WITH MECHANICAL WORK (CHILLED WATER OUTAGE) TO ALLOW FOR CONNECTION OF NEW FEEDER FROM MCB TO PCQC. COORDINATE OUTAGE WITH OWNER IN ACCORDANCE WITH VA REQUIREMENTS.
- ADD 1600A COPPER EXTENSION BUS PLATES ON LOAD SIDE OF EXISTING 1600A BREAKER AND CONNECT NEW FEEDER AS NECESSARY. PROVIDE ALL BUSWORK, DRILLINGS, HARDWARE, FASTENERS, SUPPORTS, ETC AS NECESSARY FOR A COMPLETE, SAFE AND CODE COMPLIANT INSTALLATION. FEEDER CONNECTION SHALL UTILIZE NEMA 2-HOLE, LONG BARRELED, COPPER, COMPRESSION STYLE TERMINALS BOLTED TO THE BUS. REMOVE AND REINSTALL EXISTING TERMINATIONS AS NECESSARY TO MAKE NEW CONNECTIONS.
- PROVIDE 480V, 3ø, 3W, 1600 AMP PORTABLE CHILLER QUICK CONNECT SWITCHBOARD (PCQC) - SEE SPECIFICATIONS AND DETAIL THIS DRAWING.
- PROVIDE KEY INTERLOCK (APARTMENT STYLE) ON PCQC SWITCHBOARD THAT COORDINATES WITH KEY INTERLOCK SYSTEM FOR EXISTING CHILLER STARTERS. KEY K1 IS CAPTURED AT MEDIUM VOLTAGE STARTER FOR CHILLER. KEY K1 CAN BE REMOVED ONCE STARTER'S DISCONNECT IS OPEN (OFF). K1 KEY CAN THEN BE UTILIZED TO UNLOCK EITHER K2 KEY OR TWO K3 KEYS FROM THE NEW APARTMENT STYLE LOCK. KEY K2 OR TWO K3 KEYS CAN ALLOW EITHER THE 1000A BREAKER IN PCQC TO CLOSE OR THE 700A AND 600A BREAKER TO CLOSE AND THUS ENERGIZE THE PORTABLE CHILLER. NOTE THE K1 KEYS ARE EXISTING AND ARE LIKELY DIFFERENT FROM ONE ANOTHER, BUT EITHER ONE MUST BE ABLE TO UNLOCK THE APARTMENT STYLE SYSTEM. CONTACT THE KEY MANUFACTURER WITH THE KEY ID INFORMATION. IF NECESSARY REPLACE THE K1 KEYS AND CYLINDERS ON THE CHILLER STARTERS TO MAKE SYSTEM FULLY OPERATIONAL.
- PROVIDE ENGRAVED LAMACOD SIGN (WHITE 1/4" TALL LETTERS ON BLACK BACKGROUND) WITH OPERATIONAL INSTRUCTIONS FOR KIRK-KEY SYSTEM AND CONNECTION PROCEDURE FOR TEMPORARY CHILLER - SEE SPECIFICATIONS.

**FEEDER SCHEDULE**

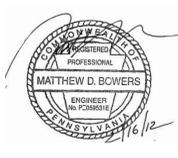
SYMBOLS	CONDUCTOR AND CONDUIT
100/3	3 #2 (5KV) + 1 #6 G (600V) IN 1 1/2" C.
100/4	4 #2 + 1 #6 G IN 1 1/2" C.
150/4	4 #1/0 + 1 #4 G IN 2" C.
300/3	3 - 350 KCMIL IN 3" C.
800/3	2 SETS OF 3 - 500 KCMIL + 1 #1 G IN TWO 3" C.
1260/3	3 SETS OF 3-600 KCMIL + 1 #3/0 G IN THREE 4" C.
1680/3	4 SETS OF 3-600 KCMIL + 1 #3/0 G IN FOUR 4" C.



**ONE-LINE DIAGRAM - EXISTING CONDITIONS AND NEW WORK**  
SCALE: NOT TO SCALE

**FINAL CONSTRUCTION DOCUMENTS**

INFECTION CONTROL COORDINATOR Janice Myers	GENERAL PROPERTIES SECTION Steve Gray	CHIEF, A&MM SECT, CONTRACTING OFFICER Elizabeth Morin	PROJECT MANAGER (COTR) John Sauser
SAFETY/OCCUPATIONAL HEALTH MGR Scott McNally	GENERAL UTILITIES SECTION H. Edward Prange	ENVIRON HEALTH FIRE/SAFETY SECT. William Gulliver	SUPERVISOR PROJECT SECTION Michael Carcanague
PATIENT SAFETY MANAGER Lyn Ordonez	PATIENT CARE SECTION Peter Duca	VA POLICE CHIEF Gerald Bonner	SUPERVISOR, BIOMED / M&D Kimberly Sekiya



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Project #: 10033

Drawing Title <b>ONE-LINE DIAGRAM, SCHEDULE AND DETAIL</b>		Project Title <b>EMERGENCY CHILLER MEP CONNECTION</b>		Date 19 July 2010
Approved: Chief Engineering Service Stephan Blanchard		Drawn EAW	Building Number 17	Project No. 542-09-117
Approved: Medical Center Director Gary W Devansky		Checked MDB	Location COATESVILLE, PENNSYLVANIA	DRAWING No. E-3 Dwg. 6 Of 6

**VA**