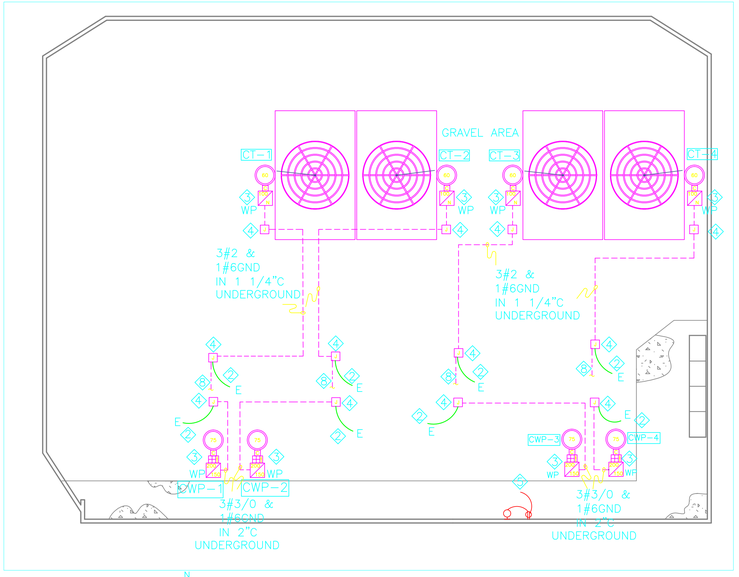
P O.L	P O.L	BLK
B O.L	B O.V	GRN
K O.L	K O.V	BLK
PP O.L	FP O.V	RED



N

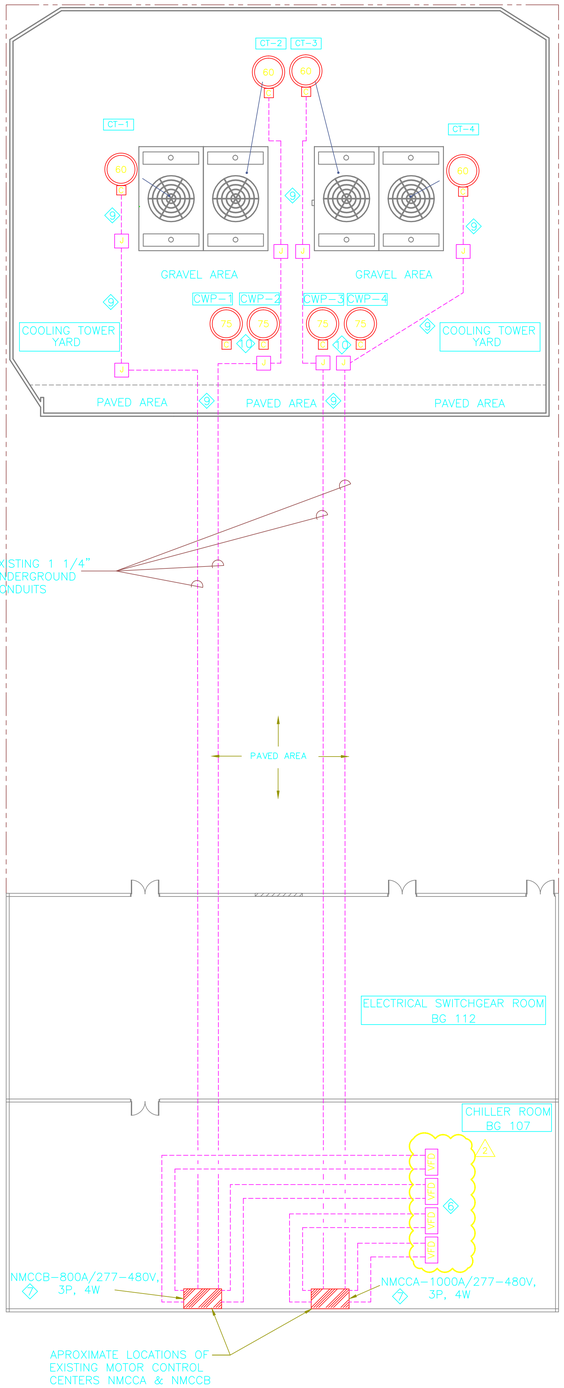
NEW OVERALL ELECTRICAL POWER PLAN
SCALE: 3/32"=1'-0"

NEW OVERALL ELECTRICAL POWER PLAN NOTES:

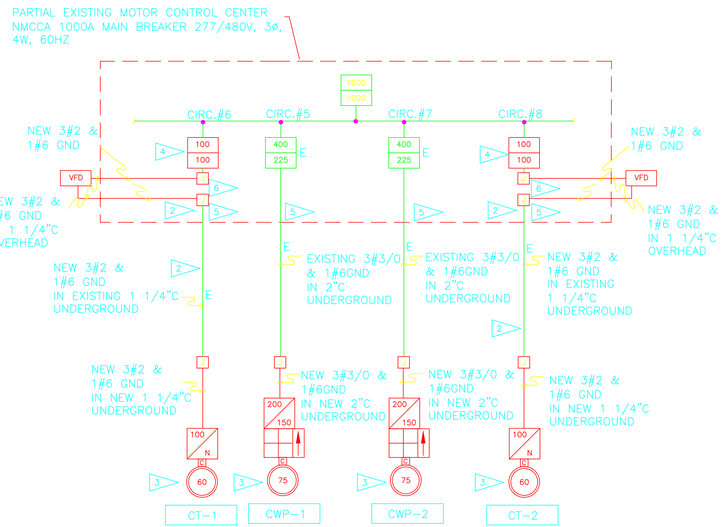
1. COORDINATE INSTALLATION LOCATIONS WITH MECHANICAL EQUIPMENT FLOOR PLAN'S LAYOUT (TYP.).
2. CONTRACTOR SHALL RE-USE THE SAME ATTACHED OVERCURRENT PROTECTION DEVICES INTO EXISTING SUPPLYING POWER PANELBOARDS/MOTOR CONTROL CENTERS, AS WELL AS EXISTING CONDUITS. PROVIDE JUNCTION BOXES AND EXTEND CIRCUITS, AS NECESSARY.
3. ALL NEW DISCONNECTS AND STARTERS SHALL BE INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR CLOSE TO EQUIPMENT, BEING STRUCTURALLY SUPPORTED BY MECHANICAL EQUIPMENT PAD. EXTEND EXISTING VIBRATION SWITCH WIRES AND CONDUITS TO THE LOCATION OF NEW VIBRATION SWITCH FOR CONNECTION. COORDINATE INSTALLATION IN FIELD WITH MECHANICAL CONTRACTOR. EQUIPMENT STARTERS ARE TO BE PROVIDED BY THE MECHANICAL CONTRACTOR.
4. INSTALL JUNCTION BOXES TO INTERCEPT EXISTING EQUIPMENT UNDERGROUND CONDUITS IN ORDER TO BE RE-USED.
5. REUSE EXISTING 120V/1P-20A CIRCUIT AND RECEPTACLE.
6. VFDs SHALL BE RACK MOUNTED INSIDE CHILLER PLANT NEAR MOTOR CONTROL CENTER, NMCCA. COORDINATE INSTALLATION OF VFDs WITH EXISTING EQUIPMENT. PROVIDE ALL NECESSARY SUPPORTING HARDWARE FOR VFD INSTALLATION. FIELD COORDINATE EXACT LOCATIONS OF NEW VFDs WITH VA CONTRACTING MANAGER. CONTRACTOR SHALL INSTALL & WIRE KLC-UL FILTERS INTERNALLY OR NEXT TO VFDs.
7. WHERE NOTED, CONTRACTOR SHALL REUSE EXISTING COOLING TOWER FAN MOTOR CONTROL CENTERS CIRCUITS BUT REPLACE THE EXISTING 100AF/90AT 480V/3P CIRCUIT BREAKERS WITH 100AF/100AT 3P 480V CIRCUIT BREAKERS. CONTRACTOR SHALL REMOVE UNUSED EXISTING COOLING TOWER DISCONNECTS AND STARTERS AND ATTACHED UNUSED CONTROL EQUIPMENT FROM EXISTING REUSED MOTOR CONTROL CENTERS SUCH AS STARTERS AND DISCONECTS. COORDINATE WORK WITH THE MOTOR CONTROL CENTER MANUFACTURER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF ANY WORK.
8. SEE "PARTIAL SITE PLAN" ON SHEET 1-E3 FOR NEW COOLING TOWER FANS' EXISTING CONDUITS & NEW WIRES ROUTING CONTINUATION.
9. PROVIDE ALL NECESSARY GROUND WORK TO INSTALL UNDERGROUND CONDUITS, SUCH AS TRENCHING, PAVEMENT BREAKING, FILLING, COMPACTING, RESEEDING AND REPAVING, AS REQUIRED TO MATCH EXISTING GROUND CONDITIONS.
10. REFER TO "NEW OVERALL ELECTRICAL POWER PLAN" ON THIS SHEET FOR CONDUIT AND WIRES DETAILS.

CONTRACTOR COORDINATION WORK NOTE:

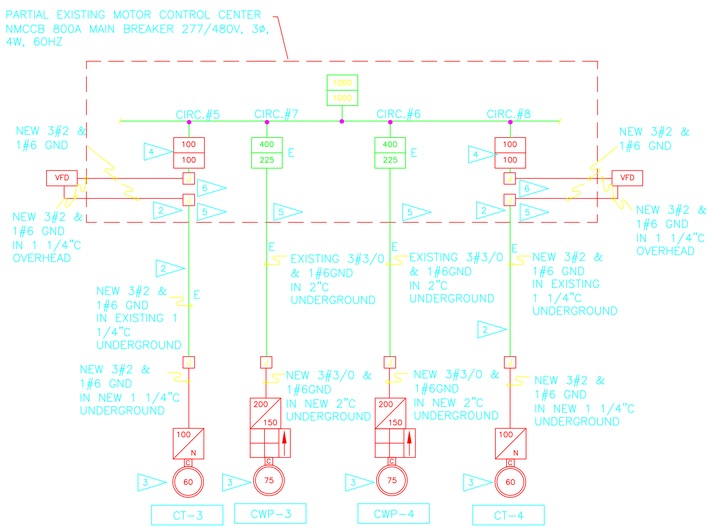
ELECTRICAL CONTRACTOR SHALL COORDINATE ENTIRE INSTALLATION WITH THE MECHANICAL CONTRACTOR PRIOR TO COMMENCEMENT OF ANY WORK.



PARTIAL ELECTRICAL SITE PLAN
SCALE: 1/16"=1'-0"



PARTIAL NEW NMCCA SINGLE LINE DIAGRAM
NO SCALE



PARTIAL NEW NMCCB SINGLE LINE DIAGRAM
NO SCALE

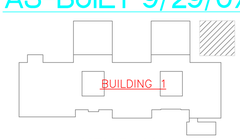
NEW NMCCA AND NMCCB SINGLE LINE DIAGRAM NOTES:

1. GROUND ALL ELECTRICAL EQUIPMENT AS PER N.E.C. ARTICLE 250 (TYP.).
2. ELECTRICAL CONTRACTOR SHALL DE-ENERGIZE AND REMOVE EXISTING WIRING AND REPLACE THEM WITH 3#2 & 1#6 GND IN EXISTING 1 1/4"C.
3. PROVIDE EXTENSION WIRING 2#10 IN UNDERGROUND 3/4"C FROM EACH NEW COOLING TOWER FAN VIBRATION SWITCH TO EXISTING VIBRATION SWITCH. FIELD COORDINATE LOCATION OF NEW VIBRATION SWITCH WITH THE MECHANICAL CONTRACTOR.
4. INSTALL 3P 100A/100A TRIP SETTING CIRCUIT BREAKER @ 480V IN EXISTING MOTOR CONTROL CENTER PANEL IN LIEU OF 3P 100A/90A TRIP SETTING CIRCUIT BREAKER. NEW BREAKER TO MATCH EXISTING BREAKERS.
5. REMOVE ALL UNUSED COOLING FAN CONTROL EQUIPMENT FROM MOTOR CONTROL CENTERS. COORDINATE WORK WITH MOTOR CONTROL CENTER MANUFACTURER'S REPRESENTATIVE.
6. ELECTRICAL CONTRACTOR SHALL PROVIDE CONNECTIONS FROM EXISTING MOTOR CONTROL CENTER'S COOLING FAN BRANCH STARTER AND BREAKER TERMINATIONS TO THE NEW VFD.

GRAPHIC SCALE
8' 0 10' 20' 30' 40'
1/16"=1'-0"

GRAPHIC SCALE
24" 0 6' 12' 18' 24' 30'
3/32"=1'-0"

AS-BUILT 9/29/07



KEY PLAN
REPLACE COOLING TOWER

DATE	DESCRIPTION
9-28-06	VFDs RELOCTAION
9-29-06	CLARIFICATION OF OF VFD LOCATION

REVISIONS

CONSULTANTS

GEORGE SANTIS
FLEE # 6068

ARCHITECTS/ ENGINEERS/ INTERIOR DESIGN
CDE COMPANY
Cape Design Engineering Co.
191 Center St. Ste. 201
Cape Canaveral, FL. 32920
Phone: (321) 799-0300
BUSINESS LICENSE # EB8072

DRAWING TITLE: NEW OVERALL ELEC., POWER PLAN, S.L.D.

APPROVED PROJECT DIRECTOR

PROJECT TITLE: REPLACE COOLING TOWERS

BUILDING NUMBER: 1

CHECKED: PWT

DRAWN: KS

LOCATION: VAMC Palm Beach County, Florida

DATE: 09-25-2006

PROJECT No: 548-05-110

DRAWING No: 1-E3

DWG OF

Veterans Administration