



2/2/06	PROG. REVIEW #1
3/10/06	PROG. REVIEW #2
3/27/06	PROG. REVIEW #3
4/10/06	PROG. REVIEW #4
5/3/06	PRELIM. DESIGN

MARK	DATE	DESCRIPTION
DRAWING ISSUED: 05/03/2006		

NOB PROJECT NO.: 220027

PRELIMINARY DESIGN

DRAWING TITLE:
ELECTRICAL
ONE-LINE DIAGRAM
CENTRAL PLANT

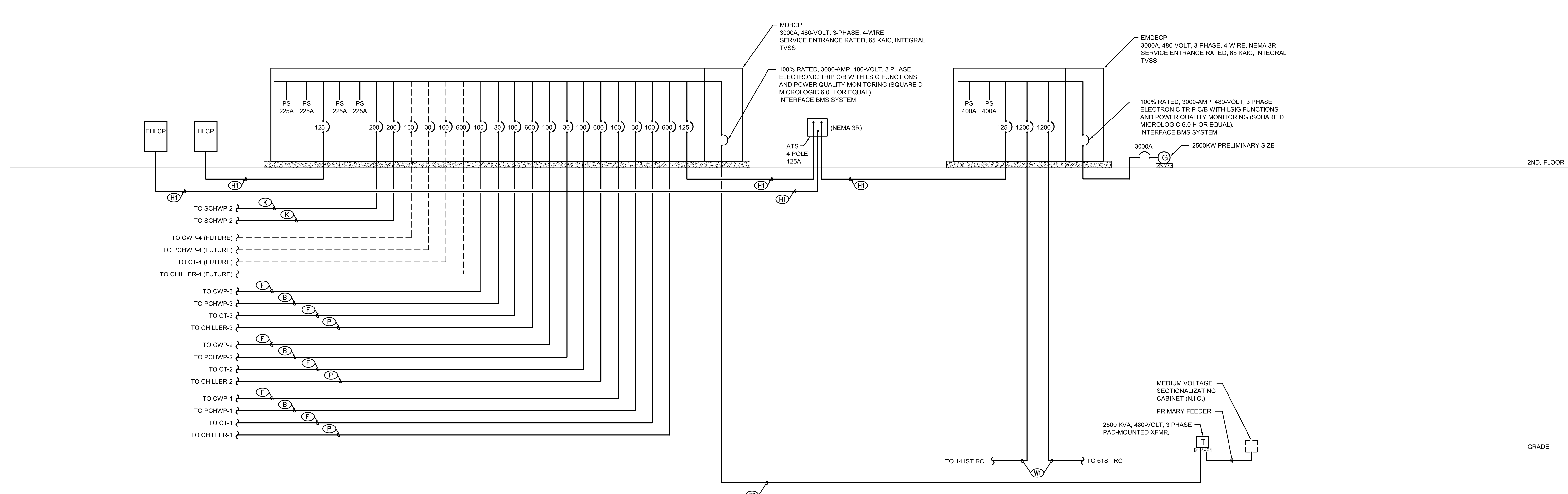
DRAWING NUMBER:

E613
SHEET 105 OF 106

ITEM	KVA	PRIMARY SIDE 480 VOLTS Δ		SECONDARY SIDE 208/120 VOLTS WYE		SERVICE GROUND CONDUCTOR (NOTES)
		FULL LOAD (150%MIN.)	WIRING THW/THHN	FULL LOAD (125% MAX.)	WIRING THW/THHN	
1	9	10.8	20A, 3-#12, #12 GRD., 3/4"C.	25	30A, 4-#10, #10 GRD., 3/4"C.	#6
2	15	18.0	30A, 3-#10, #10 GRD., 3/4"C.	41.7	50A, 4-#8, #10 GRD., 1"C.	#6
3	36.1	60A	3-#6, #10 GRD., 1"C.	83.3	100A, 4-#3, #8 GRD., 1-1/4"C.	#6
4	45	54.2	100A, 3-#3, #8 GRD., 1-1/4"C.	125.0	150A, 4-#10, #6 GRD., 2"C.	#6
5	75	90.4	150A, 3-#10, #6 GRD., 1-1/2"C.	208.4	250A, 4-#40, #4 GRD., 2-1/2"C.	#2
6	112.5	135.5	200A, 3-#30, #6 GRD., 2"C.	312.5	400A, 4-#500 MCM, #3 GRD., 3-1/2"C.	#10
7	150	180.7	300A, 3-#300 MCM, #4 GRD., 3"C.	416.7	600A, (2) 4-#350 MCM, #1 GRD., 2-3/4"C.	#20
8	225	271.1	400A, 3-#500 MCM, #3 GRD., 3-1/2"C.	625.0	800A, (2) 4-#500 MCM, #10 GRD., (2) 3-1/2"C.	#30

NOTES: 1. TRANSFORMER "X" SHALL BE BONDED WITH SECONDARY NEUTRAL CONDUCTOR, AND FEEDER GROUND CONDUCTOR TO:
a) BUILDING STEEL, b) COLD WATER PIPE, AND c) 5/8"x10'-0" COPPER CLAD GROUND ROD ON BUILDING MAIN SERVICE ENTRANCE GROUND.

LABEL	NO.	SIZE	COND.	CONDUIT
A	3	#12	#12	1/2"
AL	4	#12	#12	1/2"
B	3	#10	#10	3/4"
BL	4	#10	#10	3/4"
C	3	#8	#10	1"
CL	4	#8	#10	1"
D	3	#6	#6	1"
DL	4	#6	#6	1"
E	3	#4	#8	1-1/4"
EL	4	#4	#8	1-1/4"
F	3	#3	#8	1-1/4"
FL	4	#3	#8	1-1/4"
G	3	#2	#6	1-1/4"
GL	4	#2	#6	1-1/4"
H	3	#1	#6	1-1/2"
HL	4	#1	#6	1-1/2"
I	3	#10	#6	1-1/2"
IL	4	#10	#6	1-1/2"
J	3	#20	#6	2"
JL	4	#20	#6	2"
K	3	#30	#6	2"
KL	4	#30	#6	2"
L	3	#40	#4	2"
LL	4	#40	#4	2-1/2"
M	3	#250 MCM	#4	2-1/2"
ML	4	#250 MCM	#4	2-1/2"
N	3	#350 MCM	#3	3"
NL	4	#350 MCM	#3	3"
O	3	#500 MCM	#3	3-1/2"
OL	4	#500 MCM	#3	3-1/2"
P	(2)3	#350 MCM	#1	3 1/2 SETS
PL	(2)4	#350 MCM	#1	3 1/2 SETS
Q	(2)3	#500 MCM	#10	4 1/2 SETS
QL	(2)4	#500 MCM	#10	4 1/2 SETS
R	(3)3	#350 MCM	#20	3 1/3 SETS
RL	(3)4	#350 MCM	#20	3 1/3 SETS
T	(3)3	#500 MCM	#20	4 1/3 SETS
TL	(3)4	#500 MCM	#20	4 1/3 SETS
U	(2)3	#600 MCM	#30	4 1/2 SETS
UL	(2)4	#600 MCM	#30	4 1/2 SETS
V	(3)3	#600 MCM	#30	4 1/3 SETS
VL	(3)4	#600 MCM	#30	4 1/3 SETS
W	(3)4	#750 MCM	#40	4 1/4 SETS
WL	(3)4	#600 MCM	#40	4 1/5 SETS
X	(3)4	#600 MCM	#40	4 1/8 SETS
XX	SEE DRY TRANSFORMER SCHEDULE			



1 ELECTRICAL ONE-LINE DIAGRAM - CENTRAL PLANT
SCALE: NTS