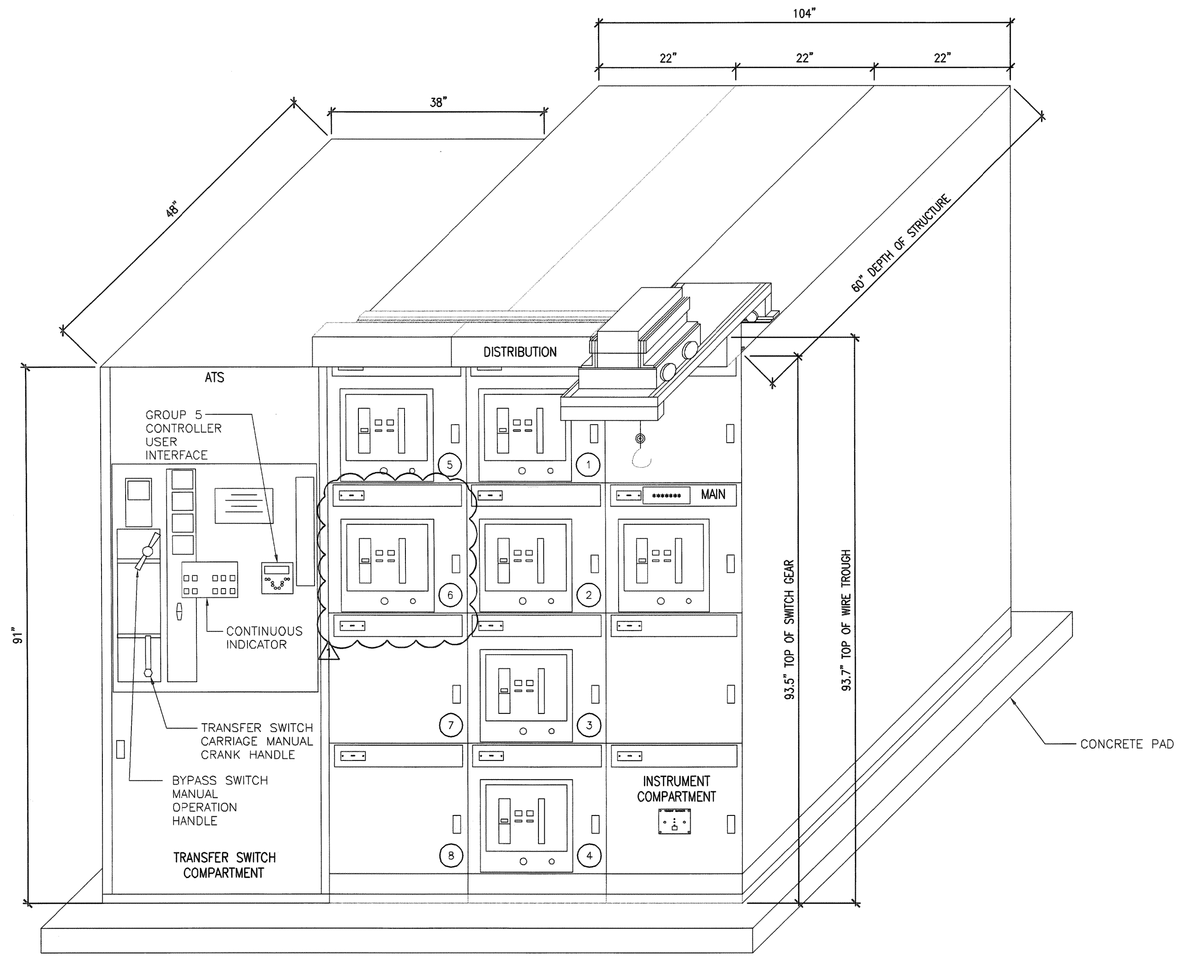
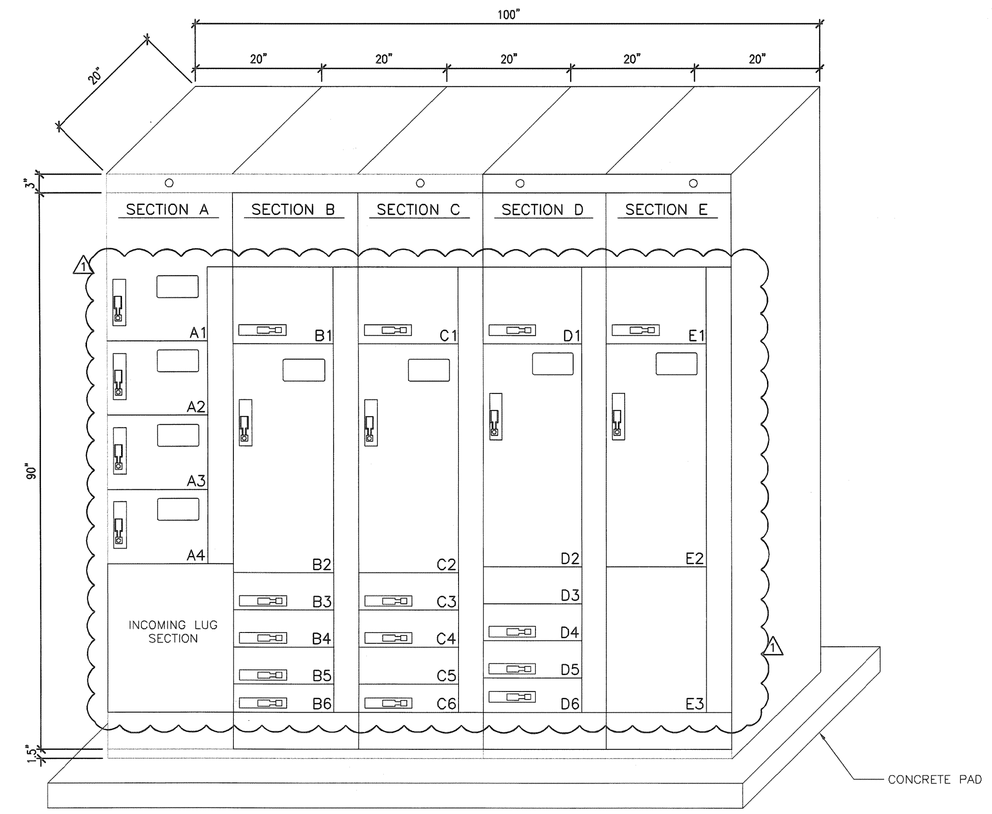


C1 MAIN SWITCHGEAR AND AUTOMATIC TRANSFER SWITCH ELEVATION

SCALE: NONE



F1 MOTOR CONTROL CENTER "MCC" ELEVATION

SCALE: NONE

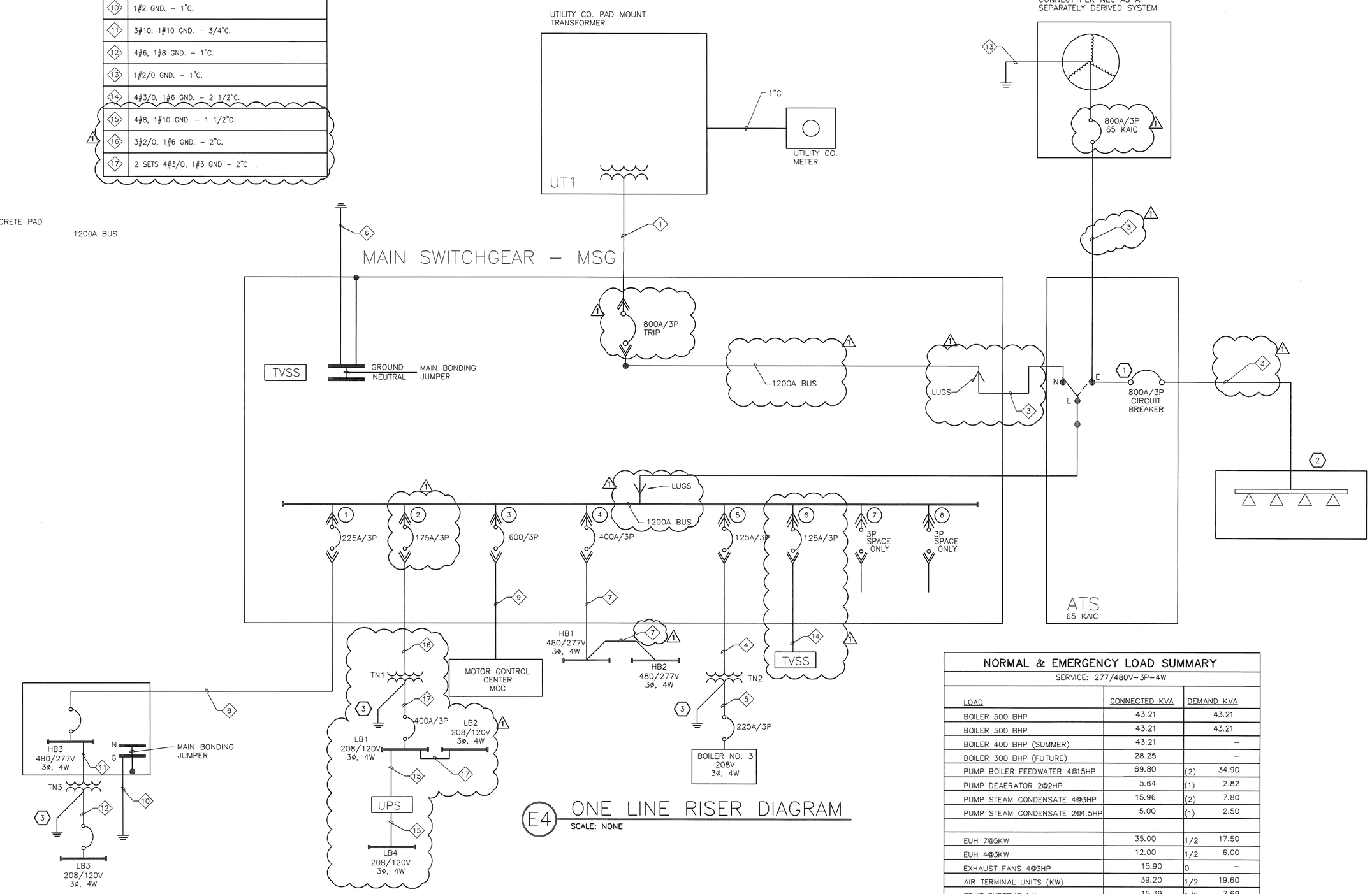
FEEDER LEGEND

1	4 SETS 4#350 KCMILS, – 3"C.
2	4 SETS 4#350 KCMILS, 1#2/0 GND. – 3"C.
3	3 SETS 4#300 KCMILS, 1#2/0 GND. – 3"C.
4	3#1/0, 1#6 GND. – 1 1/2"C.
5	4#300KCMILS, 1#1/0 GND – 3"C.
6	1#3/0 GND. – 1"C.
7	2 SETS 4#3/0, 1#1/0 GND. – 3"C.
8	4#4/0, 1#4GND. – 2 1/2"C.
9	2 SETS 4#350 KCMILS, 1#1 GND. – 3"C.
10	1#2 GND. – 1"C.
11	3#10, 1#10 GND. – 3/4"C.
12	4#6, 1#8 GND. – 1"C.
13	1#2/0 GND. – 1"C.
14	4#3/0, 1#6 GND. – 2 1/2"C.
15	4#8, 1#10 GND. – 1 1/2"C.
16	3#2/0, 1#6 GND. – 2"C.
17	2 SETS 4#3/0, 1#3 GND – 2"C.

EXISTING BOILER HOUSE
BUILDING 8

DRAWING KEYNOTES

1. ON GENERATOR SIDE OF AUTOMATIC TRANSFER SWITCH ATS PROVIDE CIRCUIT BREAKER. RUN CABLES FROM CIRCUIT BREAKER TO PORTABLE GENERTOR CONNECTION NEMA 3R ENCLOSURE MOUNTED ON THE EXTERIOR OF BUILDING. LOCATION DETERMINED BY THE OWNER AND ENGINEER. SEE PORTABLE GENERATOR CONNECTION DETAIL C7 ON SHEET E503 FOR ADDITIONAL INFORMATION.
2. PORTABLE GENERATOR CONNECTION.
3. REFER TO TRANSFORMER SCHEDULE, SHEET E605, FOR DRY TYPE TRANSFORMER INFORMATION INCLUDING GROUND SIZES.



E4 ONE LINE RISER DIAGRAM

SCALE: NONE

NORMAL & EMERGENCY LOAD SUMMARY

SERVICE: 277/480V–3P–4W

LOAD	CONNECTED KVA		DEMAND KVA
BOILER 500 BHP	43.21		43.21
BOILER 500 BHP	43.21		43.21
BOILER 400 BHP (SUMMER)	43.21		–
BOILER 300 BHP (FUTURE)	28.25		–
PUMP BOILER FEEDWATER 4@15HP	69.80	(2)	34.90
PUMP DEAERATOR 2@2HP	5.64	(1)	2.82
PUMP STEAM CONDENSATE 4@3HP	15.96	(2)	7.80
PUMP STEAM CONDENSATE 2@1.5HP	5.00	(1)	2.50
EUH 7@5KW	35.00	1/2	17.50
EUH 4@3KW	12.00	1/2	6.00
EXHAUST FANS 4@3HP	15.90	0	–
AIR TERMINAL UNITS (KW)	39.20	1/2	19.60
SPLIT SYSTEMS (4)	15.39	1/2	7.69
RTU BOILER (SPOT)	57.1	0	–
RTU ADMINISTRATION	48.9	(75)	36.68
COMBUSTION AIR FANS 4 @ 5 HP	25.3	(2)	12.65
AIR COMPRESSOR 2@10HP	23.27	(1)	11.64
SUMP PUMP 2@1HP	6.23	(1)	3.16
FUEL OIL PUMP 2@1.5HP	5.00	(0)	–
LIGHTS & RECEPTS 8500SF X 5VA	42.5	(.8)	34.00
TOTALS – KVA	580.07		283.36
480Y/277V, 3P, 4W KW@0.9PF	522.06		255.02
AMPS	698.03		340.96

100% CONSTRUCTION DOCUMENTS

REVISION NO.	REVISION DESCRIPTION	BY	DATE
1	CLARIFICATIONS	JE	01-17-14

Revisions | By | Date

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HSH PROJECT # 11015

Recommended Approvals:	
1. MEDICAL DIRECTOR	6. OPERATIONS SERVICE LINE MANAGER
2. ASSOCIATE DIRECTOR	7. INFECTION CONTROL MANAGER
3. CHIEF OF STAFF	8. SAFETY MANAGER
4. ASSOC. DIRECTOR	9. GENERAL ENGINEER
5. SERVICE LINE MGRS.	10. COTR

Drawing Title: ONE LINE RISER DIAGRAM

★BUILDING IS FULLY SPRINKLERED★

Project Title: REPLACE BOILER PLANT/ COGEN/CHP

Date: APRIL 30, 2012

Project Number: 544-11-101

Drawn	Building Number	AutoCAD File Name
DC	21	
Checked	Reviewed	Const. Contract No.

DRAWING No. E601

Veterans Affairs