LEGEND

- FLUORESCENT LIGHTING FIXTURE
- INCANDESCENT OR HID LIGHTING FIXTURE
- EMERGENCY BATTERY LIGHT - TYP "BOC"

(LETTER DENOTES TYPE, SEE FIXTURE SCHEDULE, THIS DRAWING)

- M MANUAL MOTOR STARTER, 4'-0"
- S3 THREE WAY SWITCH, +3'-4"
- T TRANSFORMER
- DUPLEX RECEPTACLE + 1'-6", 20A, 125V, 2P, 3W, NEMA 5-20R
- S FE CEILING SMOKE DETECTOR, PHOTO ELECTRIC TYPE
- PANELBOARD 208/120V, TOP +5'-9"
- PANELBOARD 480/277V, TOP +5'-9"
- MAGNETIC MOTOR CONTROLLER (STARTER), NEMA SIZE AS NOTED, TOP +5'-9"
- FUSED OR NONFUSED DISCONNECT SWITCH (NF: NON-FUSED), (FU: FUSED) 240V OR 600V AS REQUIRED, AMPS & POLES AS NOTED, TOP +5'-9"
- MOTOR CONNECTION, FINAL CONNECTION WITH FLEXIBLE CONDUIT
- CONDUIT RUN EXPOSED, 3/4" U.O.N.
- HOMERUN TO PANEL - NUMBER OF CIRCUITS INDICATED BY NUMBER OF ARROWS
- HATCHING INDICATE NUMBER OF WIRES IF OTHER THAN TWO, 1 INDICATES EQUIPMENT GROUNDING CONDUCTOR
- W WALL PHONE OUTLET, +4'-6"
- T TELEPHONE CONDUIT HOMERUN

LIGHTING FIXTURE SCHEDULE

TYPE OF SYMBOL	FILE NUMBER, SEE SPECIFICATION OR DETAIL/REMARKS	NUMBER AND TYPE OF LAMPS	MOUNTING (CEILING U.O.N.)	VOLTAGE	REMARKS/NOTES
EGA	NO 916	2-F40V T12	PENDANT 12'-0" AFF	277	
EGB	NO. 990	1-250W HV	WALL 8'-0" AFF	277	PROVIDE COLOR CORRECTED LAMP
EGC	NO 813	2-25W	WALL, 12'-0" AFF	120	SEALED BEAM LAMP

LIGHTING FIXTURE NOTES:

1. SEE SPECIFICATIONS FOR LIGHTING FIXTURE PLATES.

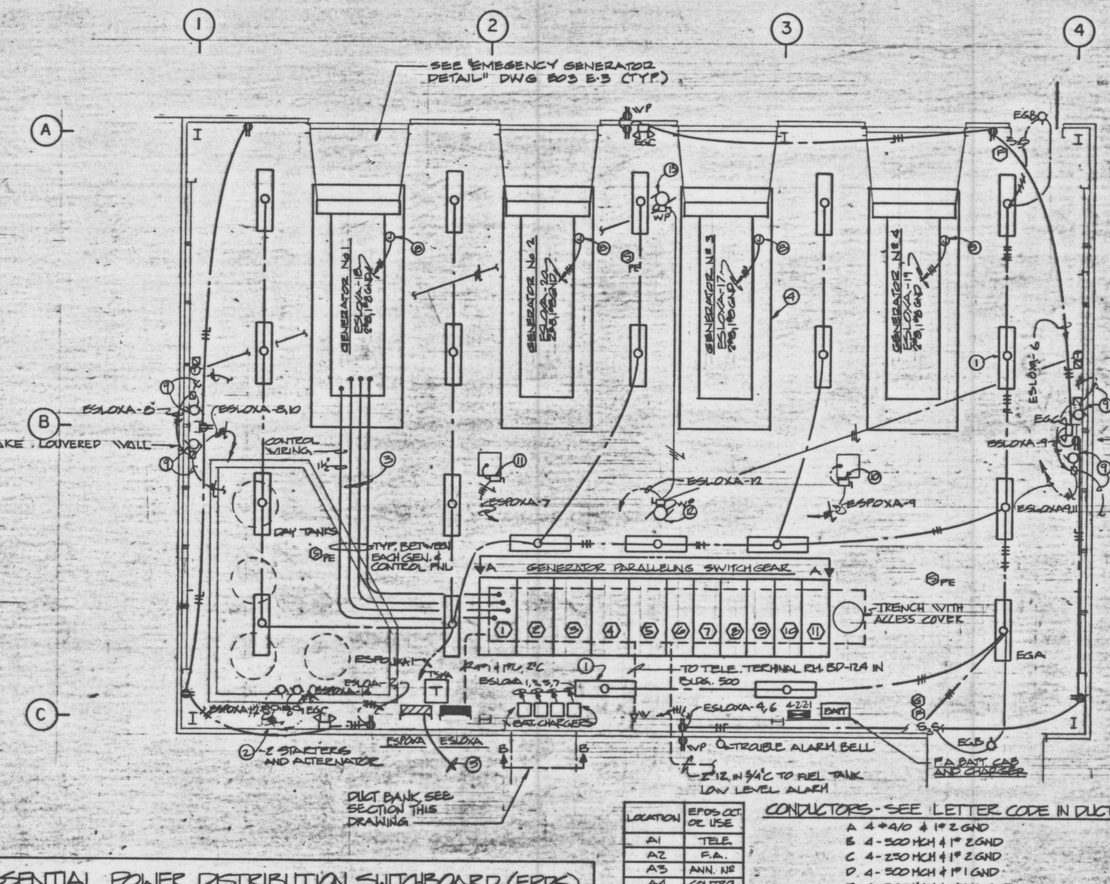
PANELBOARD SCHEDULES

PANEL	BRKR	RATING	WIRE	LOAD
ESPOXA 480/277V 3Ø 4W, 3W SURFACE MTR (6)	1	20A, 1P	12	LIGHTING
	3,5	20A, 1P	—	SPACE
	7	20A, 3P	12	503-ELH-1 (7.5KW)
	9	20A, 3P	12	503-ELH-2 (7.5KW)
	11	50A-3P	6	TRANSFORMER T5XA (30KVA)
	13	— 3P	—	SPACE
	2-6	— 1P	—	SPACE ONLY
	8	15A, 3P	12	FUEL TRANSFER PUMP
	10	70A, 3P	6	PUMPS 2 @ 15HP STOCK WATER
	12	15A-3P	12	FUEL OIL PUMP (1/2 H.P.)
	14	15A-3P	12	FUEL OIL PUMP (1/2 HP)
ESLOXA 208/120V 3Ø 4W, 3W SURFACE MTR (7)	1	15A, 1P	12	BATTERY CHARGER GENERATOR #1
	3			#2
	5			#3
	7			#4
	9			LOUVER OPERATOR MOTOR
	11			LOUVER OPERATOR MOTOR
	13	20A, 1P	—	SPARE
	15	20A, 1P	—	SPARE
	17	40A-2P	8	*ENGINE COOLANT HEATER GEN #3
	19	40A-2P	8	*ENGINE COOLANT HEATER GEN #4
	21	— 3P	—	SPACE ONLY
	23	— 3P	—	SPACE ONLY
*VERIFY SIZE OF HEATERS AS FURNISHED BY GENER. MANUFACTURER	2	20A, 1P	12	RECEPTS.
	4			
	6			
	8	15A-1P		LOUVER OPERATOR MOTOR
	10			LOUVER OPERATOR MOTOR
	12	20A-1P		503-RVF-1 & 2 (VLH.P. EA)
	14	20A-1P	—	SPARE
	16	20A-1P	—	SPARE
	18	40-2P	8	ENGINE COOLANT HEATER GEN #1
	20	40-2P	8	ENGINE COOLANT HEATER GEN #2
	22	— 1P	—	SPACE ONLY
	24	— 3P	—	SPACE ONLY

ESSENTIAL POWER DISTRIBUTION SWITCHBOARD (EPDS)

MARK	FRAME	TRIP	INTER RATING	LONG TIME PICK-UP	LONG TIME DELAY	SHORT TIME PICK-UP	SHORT TIME DELAY	GROUND PICK-UP	GROUND DELAY	WIRE	SERVING
E1	1600	1400	50,000	(4)	(4)	(4)	(4)	(4)	(4)		MAIN-EQUIPMENT BUS
E2	800	800	30,000								XFER SW ATSEF VAULT 3
E3	600	500									ATSEC VAULT 4
E4											ATSEQ VAULT 5
E5											ATSEH E6-132
E6											ATSEX VAULT 2
E7											ATSEQ VAULT 9
E8		800									ATSEE VAULT 1
E9		—								—	SPACE ONLY
C1	1600	1400	50,000								MAIN-CRITICAL BUS
C2	600	500	30,000								XFER SW ATSCC VAULT 4
C3		400									ATSCQ VAULT 5
C4		400									ATSCF VAULT 5
C5		300								300 MCM	ATSCX VAULT 2
C6		150								4/0	ATSCZ VAULT 1
C7		—								—	SPACE ONLY
S1	1600	1400	50,000								MAIN-LIFE SAFETY BUS
S2	600	400	30,000								XFER SW. ATSEL VAULT 4
S3		400									ATSSQ VAULT 5
S4		350									ATSSX VAULT 2
S5											ATSSF VAULT 3
S6											ATSSZ VAULT 1
S7		—								—	SPACE ONLY
S8		—								—	SPACE ONLY

NOTE: SEE ESSENTIAL POWER SYSTEM ONE LINE CONTROL DIAGRAM DWG. NO 503-E2 FOR ADDITIONAL INFORMATION.



FIRE ALARM DISER

NO SCALE

LOCATION	EPDS CKT OR USE
A1	TELE.
A2	F.A.
A3	ANN. NE
A4	CONTROL
A5	EB
A6	EB
A7	C6
A8	S6
B1	E7
B2	E7
B3	C3
B4	E6
B5	E2
B6	E2
B7	E3
B8	C2
C1	E7
C2	E7
C3	C3
C4	E6
C5	E2
C6	E2
C7	E3
C8	C2

CONDUCTORS - SEE LETTER CODE IN DUCT

- A 4 #4/0 & 1" 2 GND
- B 4 - 500 MCM & 1" 2 GND
- C 4 - 250 MCM & 1" 2 GND
- D 4 - 300 MCM & 1" 1 GND
- E 4 - 300 MCM & 1" 1/0 GND
- F 4 #1 & 1" #6 GND
- G AS REQUIRED

	1	2	3	4	5	6	7	8
A	G	G	G	G	G	G	G	G
B	D	D	D	D	D	D	D	D
C	D	D	D	D	D	D	D	D
D	D	D	D	D	D	D	D	D
E	D	D	D	D	D	D	D	D
F	O	O	D	D	D	D	D	D

SECTION 'B-B' DUCT BANK

LOCATION	EPDS CKT OR USE
D1	E4
D2	E4
D3	C3
D4	S4
D5	C4
D6	S5
D7	E5
D8	C2
E1	E4
E2	E4
E3	S3
E4	S4
E5	C4
E6	S5
E7	POWER
E8	S2
F1	SPARE
F2	SPARE
F3	S3
F4	C5
F5	C4
F6	E3
F7	E3
F8	S2

11	10	9	8	7	6	5	4	3	2	1
22'	22'	22'	22'	22'	22'	30'	30'	30'	30'	30'
S2 800	S1 1600	C2 800	C1 1600	E2 800	E1 1600					
S4 800	S3 800	C4 800	C3 800	E4 800	E3 800					
S6 800	S5 800	C6 800	C5 800	E6 800	E5 800					
S8 SPACE	S7 SPACE	C7 SPACE	C5 SPACE	E8 800	E7 800	MASTER CONTROL PANEL & RELAYS	GENERATOR #4 CONTROL	GENERATOR #3 CONTROL	GENERATOR #2 CONTROL	GENERATOR #1 CONTROL

EPDS

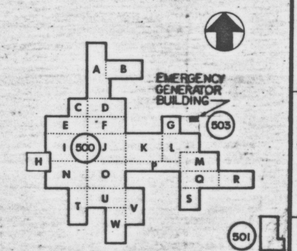
FRONT ELEVATION 'A-A'

GENERATOR PARALLELING SWITCHGEAR

NO SCALE

NOTES THIS DRAWING:

1. UNSWITCHED LIGHTING FIXTURE
2. 30A 3P, NF FOR DUPLEX FUEL TRANSFER PUMPS, 1/2 HP, 460V, 3Ø
3. 4-500 MCM & 1" 1/0 IN 4" CONDUIT
4. SEE DETAIL (4/E1) ON 503-D1 & DWG. NO 503-1 & 503-2 FOR GENERATOR BASE DETAILS.
5. CIRCUIT ESPOXA-10 3"C & 1" BOND TO 2-15 HP STOCKWATER PUMPS SEE SITE DWG. 500-SE13
6. BREAKER SHALL BE MIN. 14,000 A.I.C. RMS. SYM.
7. BREAKERS SHALL BE MIN. 10,000 A.I.C RMS SYM.
8. ENGINE COOLANT HEATER 208V, 1Ø TYP. FOR GENERATOR #1, 2, 3 & 4.
9. DAMPER MOTOR FOR INTAKE LOUVER INTERLOCK WITH ENGINE CONTROL PANEL THROUGH N.O AUX CONTACT TO OPEN DAMPER WHEN ENGINE STARTS.
10. 30A, 3P, NF FOR 503-ELH-2, 7.5KW, 480V. 3Ø
11. 30A, 3P, NF FOR 503-ELH-1, 7.5KW, 480V., 3Ø.
12. 30A, 2W, SN, NF, FOR 503-RVF-2, VLHP. 120V. (ON ROOF)
13. 30A 2W, SN NF, FOR 503-RVF-1, VLHP, 120V (ON ROOF)
14. CIRCUIT BREAKER LONG TIME, SHORT TIME, GROUND; PICK-UP AND DALAY SETTING SHALL BE PROVIDED BY THE EQUIPMENT MANUFACTURER - SEE SPECIFICATIONS.
15. SEE (TYP 503) FOR TYPICAL MOUNTING DETAIL FOR ELEC. EQUIP.



KEY PLAN - Lower Level

NO.	DATE	DESCRIPTION

REVISIONS

SHEET TITLE: EMERGENCY GENERATOR BUILDING PLAN & DETAILS

SCALE 1/4" = 1'-0"

BLDG. NO. 503 — PROJECT TITLE: 820 Bed Replacement Hospital Utility Plant

DRAWN: WILLIE — CHECKED: MOTLEY — DATE: OCT 12 1979

Williams and Tazewell, Perkins & Will, A Joint Venture

DRAWING NUMBER: 503-E1

SHEET 1599 OF 1609

PROJECT NUMBER: 651-001

VETERANS ADMINISTRATION

LOCATION: VAH Richmond, Virginia

THREE INCHES EQUALS ONE FOOT — ONE AND ONE HALF INCHES EQUALS ONE FOOT — ONE INCH EQUALS ONE FOOT — THREE QUARTER INCH EQUALS ONE FOOT — ONE HALF INCH EQUALS ONE FOOT — THREE EIGHTH INCH EQUALS ONE FOOT — ONE QUARTER INCH EQUALS ONE FOOT — ONE EIGHTH INCH EQUALS ONE FOOT

VA FORM 8-421 FEB. 1970