NOTES: 1. EXISTING PANEL

PANEL "AL" : CUTLER HAMMER "POW-R-LINE" - PRL1a, SURFACE MOUNT, WITH GROUND BUS
120/240 VOLT, 1 PHASE, 3 WIRE, 400 AMP, MAIN BREAKER
INTERRUPTING CAPACITY: 10K RMS SYMMETRICAL.

KVA	LOAD	BKR	TYPE	NO	Ø	NO	TYPE	BKR	LOAD	KVA
0.6	VAULT LIGHTS & RECEPTS.	20/1	BAB	1	A	2	BAB	20/1	VAULT OBSTRUCTION LIGHTS	0.2
0.8	EXHAUST FAN & DAMPER	20/1	BAB	3	B	4	BAB	20/1	SPACE ONLY	-
0.5	AIRFIELD LIGHTING CONTROLS	20/1	BAB	5	A	6	BAB	20/1	SPACE ONLY	-
0.7	WIND CONE	20/1	BAB	7	B	8	BAB	20/1	SPACE ONLY	-
3.8	RUNWAY 7-25 REGULATOR @ 7.5 KW	50/2 (REMOVE)	BAB	9	A	10	BAB	20/1	SPACE ONLY	-
3.8				11	B	12	BAB	20/1	SPARE	-
5.0	TAXIWAY REGULATOR @ 10.0 KW	60/2 (REMOVE)	BAB	13	A	14	BAB	15/2 (REMOVE)	RUNWAY 25 ODALS	1.1
5.0				15	B	16				1.1
2.0	PAPI REGULATOR @ 4.0 KW	30/2 (REMOVE)	BAB	17	A	18	BAB	30/2 (REMOVE)	AWOS VIA DRY-TYPE TRANSF. (NOT CONNECTED TO AWOS FEED - ABANDONED)	2.5
2.0				19	B	20				2.5
-	SPARE	20/1	BAB	21	A	22	BAB	20/2	WALL HEATER	1.5
-	SPARE	20/1	BAB	23	B	24				1.5
-	SPACE ONLY	20/1	BAB	25	A	26	BAB	20/1 (REMOVE)	SPACE ONLY	-
-	SPACE ONLY	20/1	BAB	27	B	28	BAB	20/1 (REMOVE)	SPACE ONLY	-
-	SPACE ONLY	20/1	BAB	29	A	30	BAB	20/1 (REMOVE)	SPACE ONLY	-
-	SPACE ONLY	20/1	BAB	31	B	32	BAB	20/1 (REMOVE)	SPACE ONLY	-
-	SPACE ONLY	20/1	BAB	33	A	34	BAB	20/1	SPACE ONLY	-
-	SPACE ONLY	20/1	BAB	35	B	36	BAB	20/1	SPACE ONLY	-
-	SPACE ONLY	20/1	BAB	37	A	38	BAB	20/1	SPACE ONLY	-
-	SPACE ONLY	20/1	BAB	39	B	40	BAB	20/1	SPACE ONLY	-
-	SPACE ONLY	20/1	BAB	41	A	42	BAB	20/1	SPACE ONLY	-

LOAD SUMMARY (KVA):	ØA	ØB
CONNECTED LOAD	16.0	16.2

TOTAL AMPS MOST HEAVLY LOADED PHASE $\frac{16.2 \text{ KVA} \times 1000}{120\text{V}} = 135.0$ AMPS

135.0 A x 1.25 = 168.8 AMPS

PANEL BOARD "AL" SCHEDULE

N.T.S.

NOTE: EXISTING ELECTRICAL RACEWAYS, WIRING AND ELECTRICAL APPARATUS SHOWN WITH LIGHT OR SCREENED LINE WEIGHT. NEW ELECTRICAL RACEWAYS, WIRING AND ELECTRICAL APPARATUS SHOWN WITH HEAVY OR DARK LINE WEIGHT.

POWER RISER DIAGRAM NOTES - EXISTING SYSTEM

PRD1. #2/0 BARE CU GROUND IN 1" SCHEDULE 40 PVC CONDUIT BONDED TO BUILDING COUNTERPOISE SYSTEM.

PRD2. 120/240 VOLT, 1Ø. LIGHTNING ARRESTOR. CONNECT PER MANUFACTURER'S RECOMMENDATIONS. **REMOVE AND PROVIDE NEW UNIT AS INDICATED.**

PRD3. METER BASE.

PRD4. NEMA 1 HINGE DOOR RELAY CABINET FOR MOUNTING OF CONTROL RELAY "R1" THRU "R7". **REMOVE AND PROVIDE NEW CABINET AND RELAYS AS INDICATED.**

PRD5. TIME CLOCK. **REMOVE AND PROVIDE NEW UNIT AS INDICATED.**

PRD6. PHOTOCELL. **REMOVE AND PROVIDE NEW UNIT AS INDICATED.**

PRD7. RADIO CONTROLLER. **REMOVE AND PROVIDE NEW UNIT AS INDICATED.**

PRD8. RADIO ANTENNA AND COAX CABLING. **REMOVE AND PROVIDE NEW ANTENNA AND COAX CABLING AS INDICATED.**

PRD9. 24"X24"X8"D. SCREW COVER NEMA 1 PULL BOX.

PRD10. PLUG CUT-OUT "S-1" (CIRCUIT ISOLATOR SWITCH). **REINSTALL IN NEW ENCLOSURE AS INDICATED.**

PRD11. 3/4" THICK PLYWOOD BACKBOARD FOR MOUNTING EQUIPMENT.

PRD12. 6"X6" NEMA 1 WIRING TROUGH WITH HINGED COVER.

PRD13. 1/2"X1/8" THICK COPPER BUS ATTACHED TO WALL WITH STANDOFFS.

PRD14. EXTERIOR WALL MOUNTING BRACKET. ANTENNA MOUNTED HIGH ON EXTERIOR WALL OF EQUIPMENT SHELTER.

PRD15. EXTERIOR WALL MOUNTING BRACKET. PHOTOCELL MOUNTED ON EXTERIOR WALL OF EQUIPMENT SHELTER .

PRD16. 18"x18"x8"D. PULL BOX.

PRD17. 5 KVA DRY-TYPE TRANSFORMER REVERSE CONNECTION. 240 VOLT INPUT TO 600V. OUTPUT. WALL MOUNTED. **REPLACE WITH NEW 3 KVA UNIT COMPLETE TO SERVE ODAL.**

PRD18. 2P/30A/600V/HD/FUSIBLE DISCONNECT SWITCH. **REPLACE FUSES WITH TWO 7 AMP DUAL ELEMENT FUSES .**

PRD19. PHOTOCELL BY-PASS SWITCH.

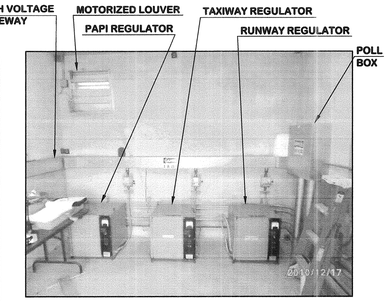
PRD20. L-841 RELAY PANEL. **REMOVE COMPLETE.**

PRD21. TRANSFER RELAY. **REMOVE COMPLETE.**

PRD22. CONTROL PANEL. **REMOVE COMPLETE.**

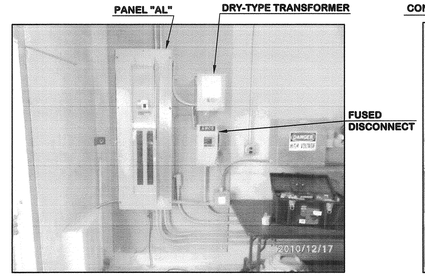
PRD23. WIND CONE AND OBSTRUCTION LIGHTS CONTACTOR. **REMOVE AND PROVIDE NEW AS INDICATED.**

PRD24. ALL LABOR AND MATERIALS SHALL BE INCLUSIVE TO THE LUMP SUM PAY ITEM "L-109B" FOR REMOVAL OF AIRPORT TRANSFORMER VAULT EQUIPMENT.



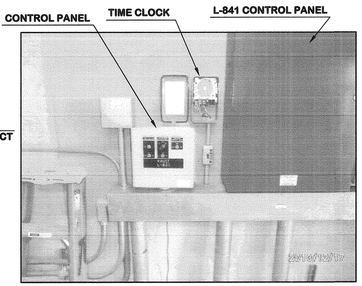
EXISTING VAULT EQUIPMENT

NTS



EXISTING VAULT EQUIPMENT

NTS



EXISTING VAULT EQUIPMENT

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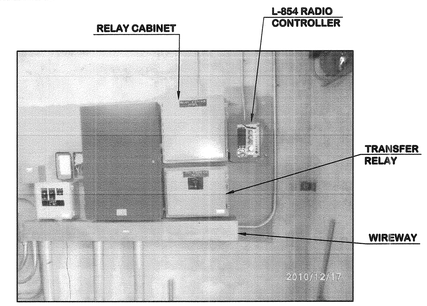
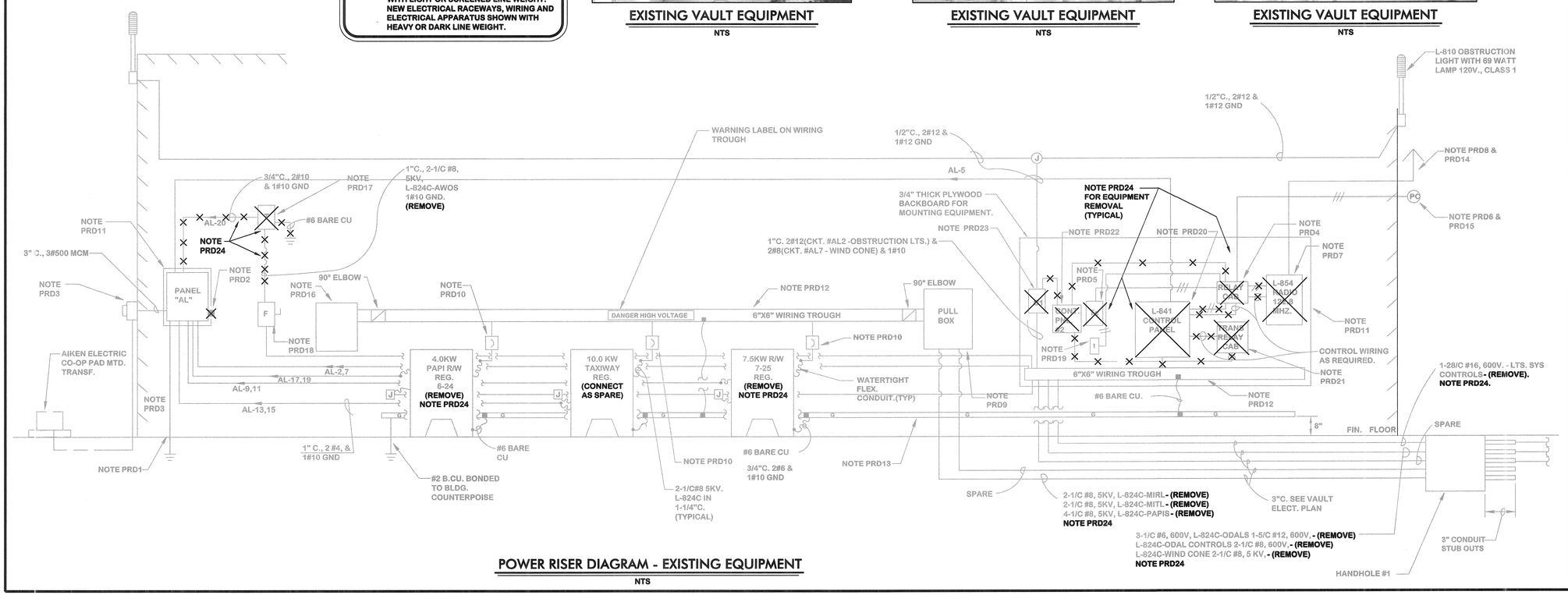


EXISTING VAULT EQUIPMENT

NTS



POWER RISER DIAGRAM - EXISTING EQUIPMENT

NTS

AIKEN SOUTH CAROLINA

AIKEN MUNICIPAL AIRPORT
AIKEN, SOUTH CAROLINA

THE LPA GROUP
TRANSPORTATION CONSULTANTS
ATLANTA, GA BATON ROUGE, LA CHARLESTON, SC CHARLOTTE, NC CHICAGO, IL COLUMBIA, SC GREENSBORO, NC GULFPORT, MS JACKSONVILLE, FL KNOXVILLE, TN MOBILE, AL ORLANDO, FL RALEIGH, NC RICHMOND, VA SARASOTA, FL TALLAHASSEE, FL TAMPA, FL WEST PALM BEACH, FL

SOUTH CAROLINA THE LPA GROUP INCORPORATED No. C00448 CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER LICENSED 5-24-11 No. 21653 GARY H. LOTT

Designer: FME/RES	Checked by: GHL
Technician: MTW	Project Number: 05500005

REVISIONS

No.	Description	Date	By

Project Name:

AIRFIELD LIGHTING REHABILITATION

Drawing Name:

POWER RISER DIAGRAM PLAN NO. 1

FAA A.I.P. Project Number: 3-45-0002-12-2010 & -14-2011

Date: MAY, 2011	Division: AIRPORTS
Scale: N.T.S.	Sheet Number:
	Drawing Number: PRD-1

Q:\ELECTRICAL\01 CLIENTS\Aiken\2010 Runway 7-25 and Taxiway Lighting\DWG\SINGLE-PHASE\AIK-VAULT LVP-1-2 PRD-1-2.DWG Last Modified: May 24, 2011 - 9:58am Plotted on: May 24, 2011 - 9:58am by TWhite