

NOTE: ALL MATERIAL SUPPLIED AND INSTALLED BY CONTRACTOR UNLESS OTHERWISE SPECIFIED.  
ALL STEEL HARDWARE AND EQUIPMENT SHALL BE GALVANIZED.

SPACE FOR POWER COMPANYS CONNECTION  
TO POLES AS PER POWER CO. REQUIREMENTS

5 FT. MINIMUM

10 FT.

POLE CLASS #3 BY POWER CO.

TYPE F CONDUIT FITTING

CONDUIT CLAMP

INCOMING TELCO CABLE BY TELEPHONE  
CO. (TO DEMARICATION BOX AT TRAILER  
TRENCHING BY CONTRACTOR)

TYPE F CONDUIT FITTING  
CONDUIT CLAMP

1 1/2" GAL. RIGID CONDUITS BY CONTRACTOR  
FOR TELCO LINES

2" GAL. RIGID CONDUIT

2 HOLE PIPE STRAPS 5" Q" APART

1 1/2" GAL. STEEL  
CONDUIT

2" CONDUIT

GROUND

TYP 2" STANDARD  
SWEEP-ELL TYR  
GROUND BUSHING  
3'-0" MIN.

D.E.B.  
3-1/2" #2 600 V TYPE USE

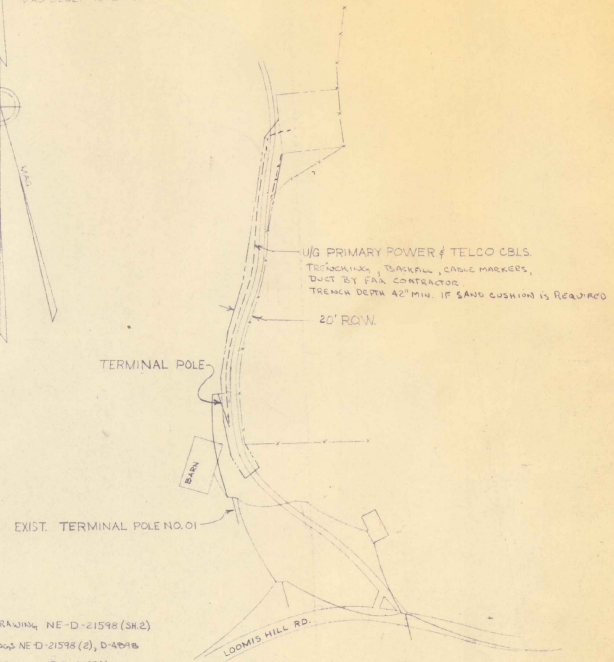
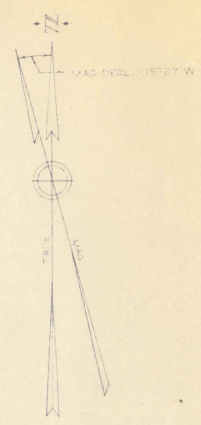
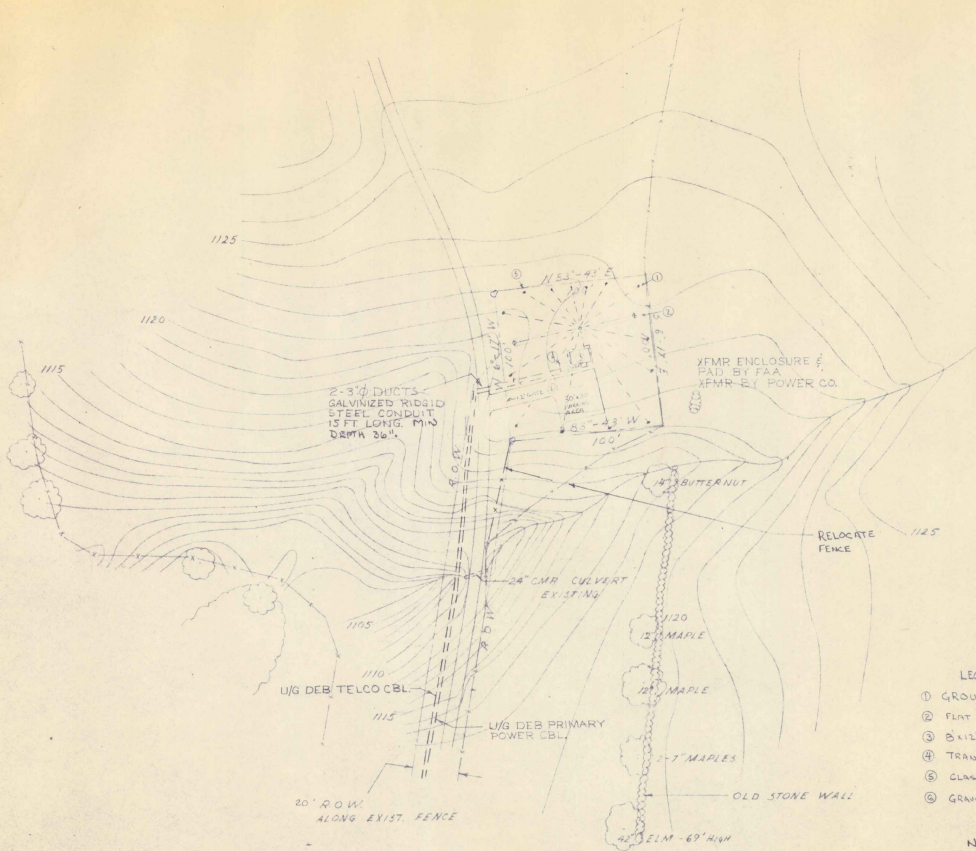
1 1/2" SWEEP ELL  
OND BUSHING

3/4" COPPER  
WIRE

NO.	REVISION	DATE	BY

POWER & TELCO  
FEDERAL AVIATION ADMINISTRATION  
TERMINAL POLE

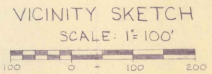
DATE: 7-27-72  
BY: [Signature]



- LEGEND**
- ① GROUND RADIAL SYSTEM SEE DRAWING NE-D-21598 (SK.2)
  - ② FLAT TOP ANTENNA SEE DRAWING NE-D-21598 (2), D-40MB
  - ③ BILL EQUIPMENT SHELTER SEE DRAWING NE-D-2078 (4) NE-D-2140
  - ④ TRANSFORMER ENCLOSURE SEE DRAWING EN-D-2082
  - ⑤ CLASS "C" SEE DRAWING 566
  - ⑥ GRAVEL SURFACE ROAD & PARKING AREA

**NOTE**

1 THE RESIDENT ENGINEER SHALL STAKE OUT THE CABLE TRENCH



**PLOT LAYOUT** SCALE: 1" = 40'

EF KIRKAD  
 COMPASS LOCATOR  
 VICINITY SKETCH

REV.	DATE	DESCRIPTION	CHECKED	APPROVED
<b>FEDERAL AVIATION ADMINISTRATION</b>				
EASTERN REGION		NEW YORK, N.Y.		
MONTPELIER, VT. BARRE-MONTPELIER STATE AIRPORT ILS R/W 17 COMPASS LOCATOR VICINITY SKETCH				
REVIEWED BY	SUBMITTED BY <i>H. Stetilla</i>		APPROVED BY <i>C.H. Schulze</i>	
DESIGNED BY	ISSUED BY	DATE: 6-13-72	REV.	
DRAWN BY		DRAWING NO. NE-D-21598		
CHECKED BY				

SHEET 1 OF 3

**NOTES**

- SITE**
1. THE PLOT TO BE ORIENTED SO BEARING OF THE PLOT CENTERLINE (FROM CENTER OF COUNTERPOISE) IS THE SAME AS THE BEARING OF THE INSTRUMENT APPROACH RUNWAY CENTERLINE.
  2. THE DOWN LEAD POLE IS TO BE LOCATED 9 FT FROM THE BLDG. CENTER LINE.
- BUILDING**
3. THE POSITIONS OF THE BUILDING AND COUNTERPOISE MAY BE REVERSED TO TAKE ADVANTAGE OF DIRECTION OF POWER LINE APPROACH, ACCESS ROAD, OR OTHER LOCAL CONDITIONS.
- POWER**
4. POWER REQUIRED IS 120-240 VOLT, 60 CYCLE, SINGLE PHASE.
  5. ALL POWER AND CONTROL LINES TO BE UNDERGROUND. CABLES INSTALLED BY OTHERS, FAA CONTRACTOR TO TRENCH, BACK FILL, INSTALL CABLE MARKERS & DUCT BANK.
  6. CONTROL REQUIRED IS A TWO CONDUCTOR METALLIC CIRCUIT.
  7. POWER AND CONTROL LINES MAY BE IN SAME TRENCH IF SEPARATED 12 IN. ON EDGES.
- GROUND SYSTEM**
8. GROUND RADIALS SHALL BE BURIED 12 INCHES MINIMUM BELOW GROUND LEVEL (12 RADIALS #6 BARE - MAY USE CABLE FLOW).
  9. CONNECT ALL RADIALS TOGETHER AND TO A GROUND ROD AT CENTER POST. CONNECT OUTER END EACH RADIAL TO GROUND ROD MARKED #6 BARE COPPER TO BE CONNECTED BY CLAMPS & BRAZING.
- FENCE**
10. FENCE TO BE CLASS 'C' WITH WOOD POSTS.
  11. PROVIDE 12 FOOT GATE IN FENCE FOR ACCESS ROAD.
  12. FENCE TO BE INSTALLED 1 FOOT INSIDE LEASED PROPERTY LINES. WILL BE 96' X 95'.
- OBSTRUCTIONS**
13. ALL OBSTRUCTIONS WITHIN 50 FT. OF COUNTERPOISE IN QUADRANTS I AND III SHALL NOT BE HIGHER THAN THE COUNTERPOISE.
  14. THERE ARE NO RESTRICTIONS ON OBSTRUCTIONS IN QUADRANTS II AND IV.

**REFERENCE DRAWINGS**

- NO. 566 CLASS 'C' FENCE (WOOD POSTS)
- NE-D-21593 COMPASS LOCATOR VICINITY SKETCH

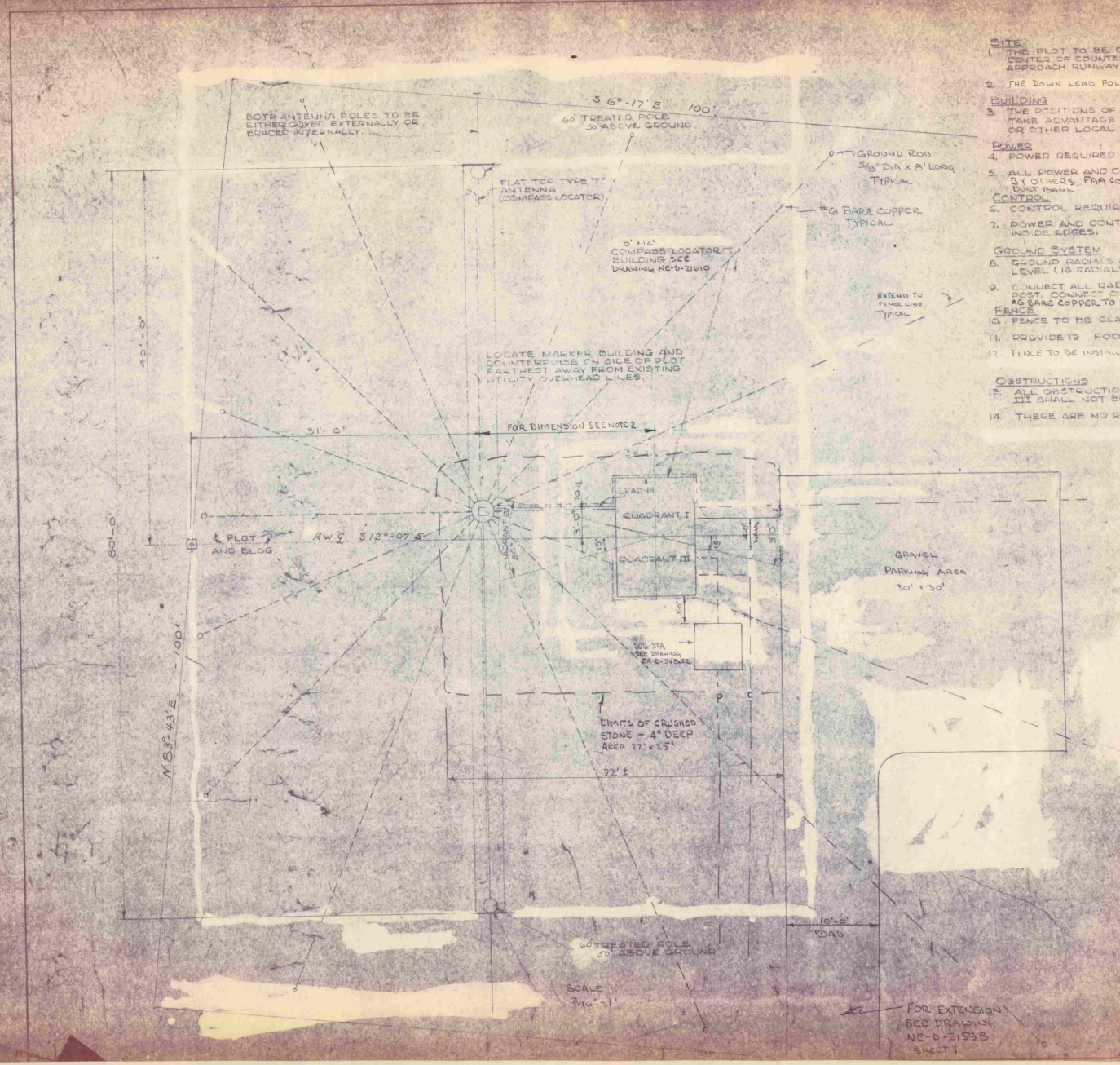
FEDERAL AVIATION AGENCY  
WASHINGTON, D.C.

INSTRUMENT LANDING SYSTEM  
BARRE-MONTPELIER STATE AIRPORT  
COMPASS LOCATOR PLOT PLAN

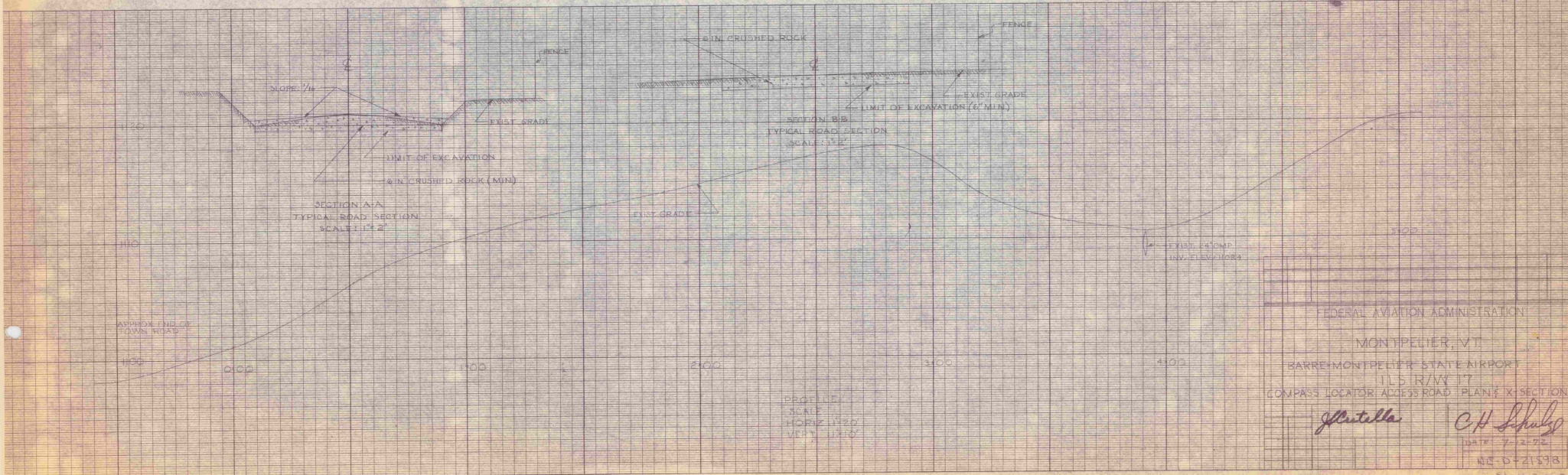
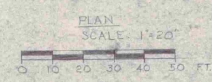
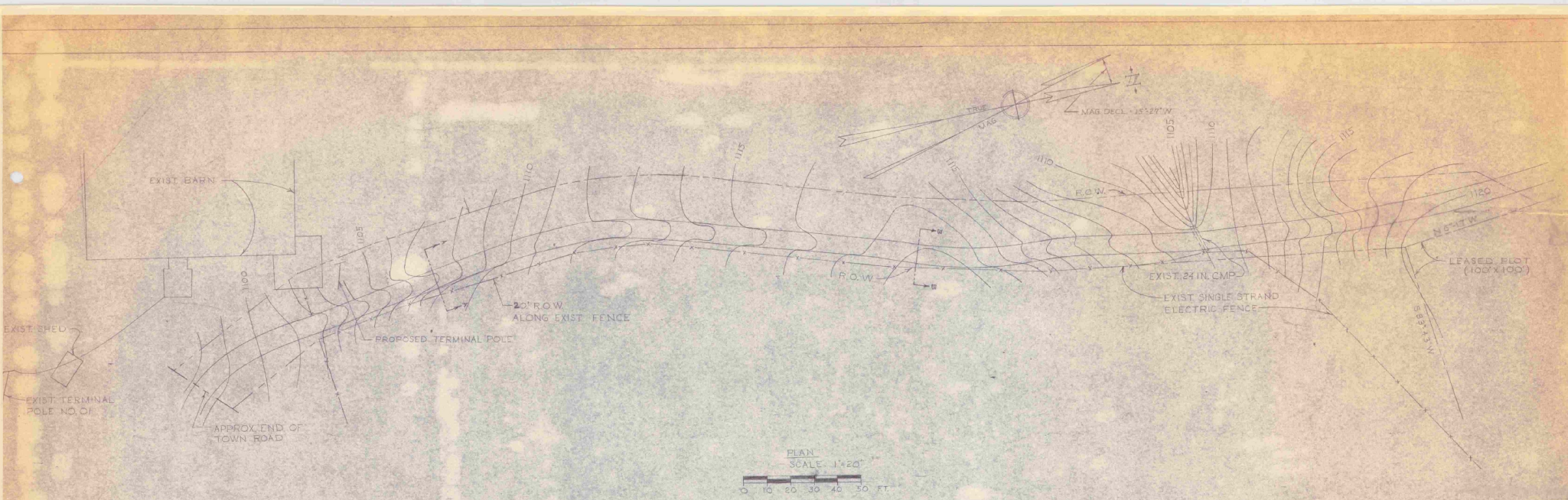
DESIGNED BY	DATE
DRAWN BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

FOR EXTENSION SEE DRAWING NE-D-21598 SHEET 1

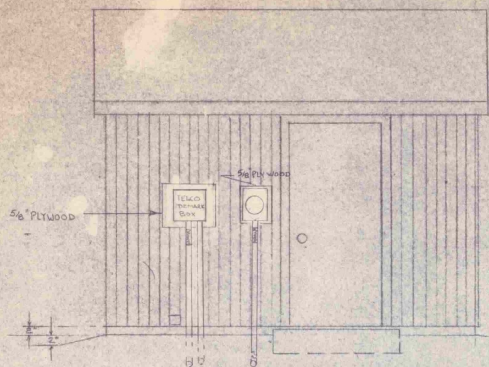
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NE-D-21598 SHEET 1



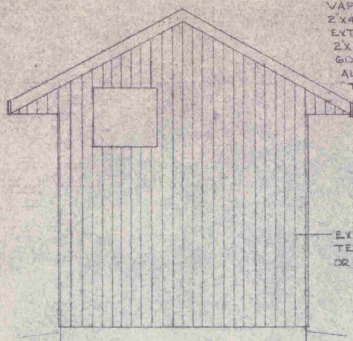
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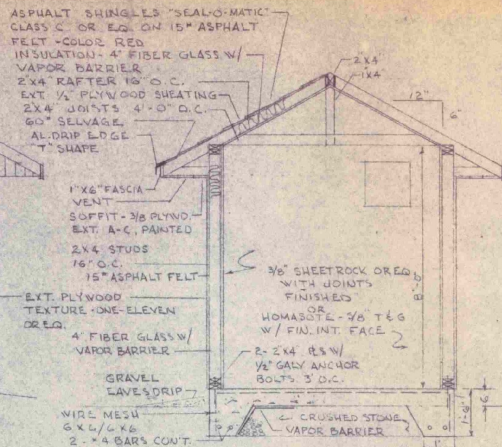
FEDERAL AVIATION ADMINISTRATION  
 MONTPELIER, VT.  
 BARRE-MONTPELIER STATE AIRPORT  
 115 R/W TT  
 COMPASS LOCATOR ACCESS ROAD - PLAN & SECTIONS  
*Glattella* *C.H. Schulz*  
 DATE: 7-2-72  
 NO. D-21598  
 SHEET 2 OF 5



FRONT ELEV.

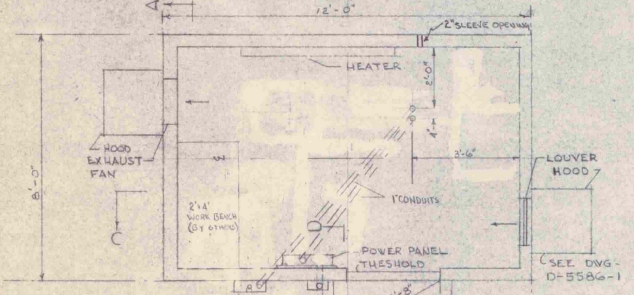


LEFT ELEV.

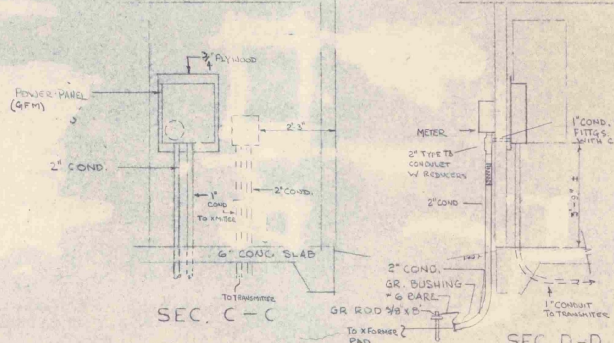


SEC. A-A

- NOTES
1. ELECTRICAL WIRING SHALL CONFORM TO SPEC. F.A. A-1217 & NATIONAL ELECT. CODE.
  2. MOUNT ARRESTER IN BUILDING, CONNECT TO INCOMING SERVICE.
  3. 2" CONDUIT RISERS SHALL INCLUDE FLEX. COND.
  4. ALL CONDUIT TERMINATED IN BOXES, PANELS SHALL HAVE DOUBLE LOCKWATS & BUSHINGS.
  5. ALL UNDERGROUND CONDUITS TERMINATE WITH GROUNDING BUSHINGS.
  6. METERS TO BE INSTALLED BY TOWER CO.
  7. THE CONTRACTOR IS TO PERFORM ALL WORK UNLESS NOTED BY OTHERS.
  8. EQUIPMENT TO BE INSTALLED IN THE BLDG. SHALL CONFORM TO COMPASS LOCATOR BUILDING EQUIPMENT SPEC.



EQUIPMENT PLAN

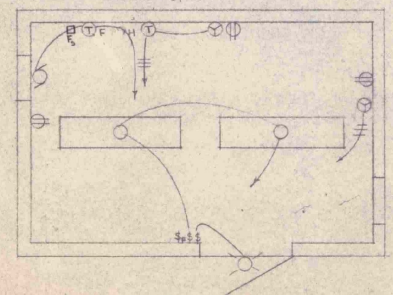


SEC. C-C

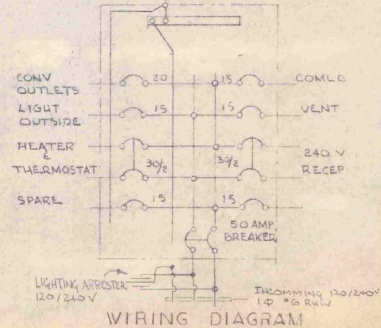
SEC. D-D

- LEGEND
- ⊕ DUPLEX REC. 4' ABOVE FLOOR.
  - ⊕ 240V REC. 4' ABOVE FLOOR.
  - ⊕ THERMOSTAT - FAN
  - ⊕ THERMOSTAT - HEATER
  - ⊕ LIGHT SWITCH 4'6" ABOVE FLOOR
  - ⊕ LIGHT FIXTURE - EXT.
  - ⊕ FLUORESCENT LIGHT FIX.
  - ⊕ FAN - MANUAL STARTER
  - Fs FUSTAT

TELCO DEMARK. BOX 12" x 12" x 4" 1/2" GALV. MET. SCREW COVER. 1 TERMINAL STRIP FOR G.P.R.

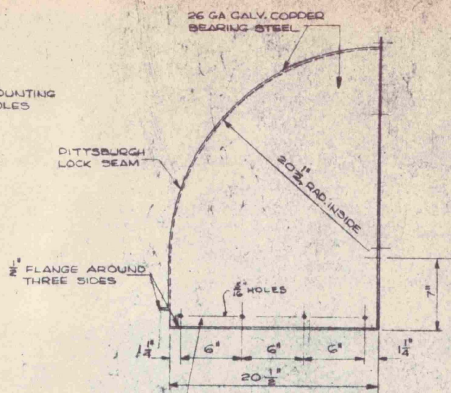
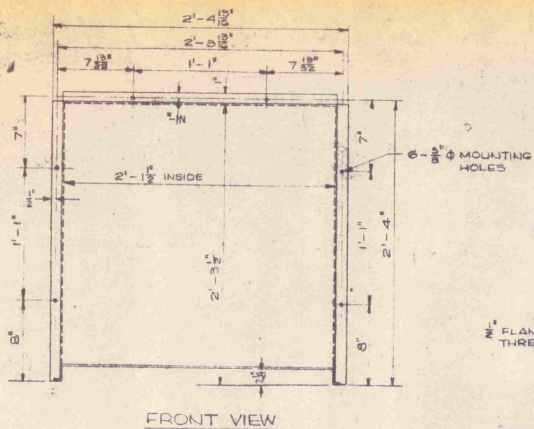


ELECT. PLAN

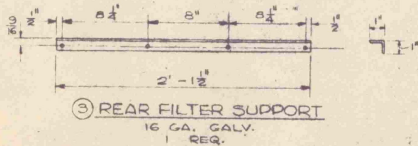
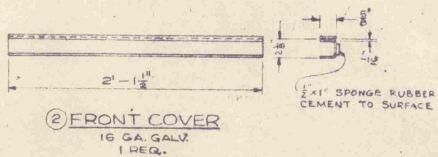
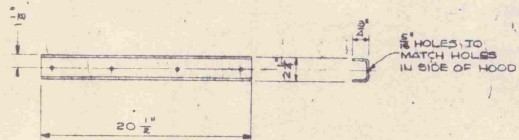


WIRING DIAGRAM

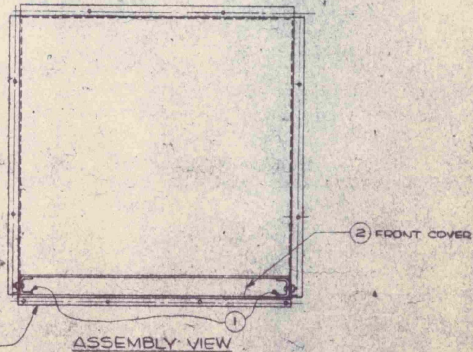
REV.	DATE	DESCRIPTION	CHECKED	APPROVED
FEDERAL AVIATION ADMINISTRATION				
EASTERN REGION		NEW YORK, N.Y.		
ILS COMLO BLDG PLANS & ELEVATIONS				
REVIEWED BY	SUBMITTED BY		APPROVED BY	
	Schittella		C.H. Schulz	
DESIGNED BY	ISSUED BY	DATE	REV.	
		7-5-72		
DRAWN BY	CHECKED BY		NE-436	NE-D-21610



① FASTEN SIDE GUIDES TO SIDE PIECES OF HOOD WITH 1/4" B.H. SCREWS, NUTS & LOCKWASHERS, NUTS OUTSIDE.



③ FASTEN REAR FILTER SUPPORT TO BUILDING WALL AT INSTALLATION WITH NO. 14 X 1/4" O.H. SHEET METAL SCREWS



### NOTES

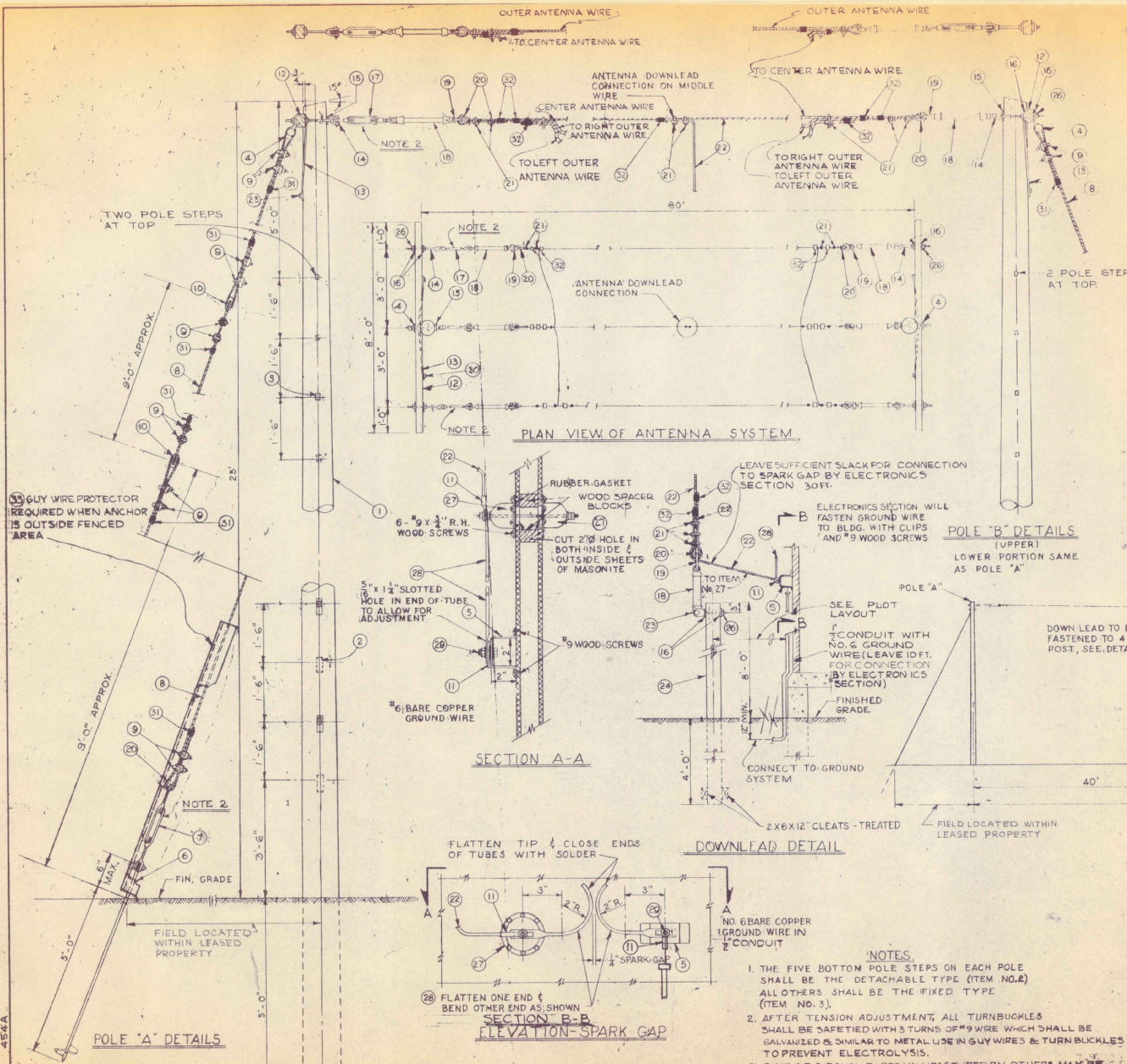
- HOOD SHALL BE SHIPPED KNOCKED DOWN FOR FIELD ASSEMBLY.
- HOOD SHALL ACCOMMODATE ONE 19 1/2" X 24 1/2" X 2" FILTER TO BE SUPPLIED BY OTHERS.
- MAKE 1/8" HEM ON ALL FLANGES OF HOOD.
- EACH COMPLETE HOOD SHALL BE PACKED IN A CARDBOARD CARTON SUITABLE FOR DOMESTIC SHIPMENT. EACH CARTON SHALL CONTAIN ASSEMBLY INSTRUCTIONS TO BE FURNISHED BY THE GOV'T, AND EACH CARTON SHALL BE MARKED WITH THE FOLLOWING: HOOD, TYPE HV-1, PURCHASE ORDER NO. (NUMBER).
- TOLERANCE FOR HOLE DIMENSIONS AND FOR ASSEMBLED HOOD DIMENSIONS IS ± 1/16".
- A PROTECTIVE SHEET METAL STRIP SHALL BE PLACED IN EACH UNASSEMBLED LOCK BEAM JOINT TO PREVENT DAMAGE DURING HANDLING AND SHIPPING.
- FURNISH THE FOLLOWING WITH EACH HOOD:  
6- 3/8" X 2 1/2" O.H. MACHINE SCREWS WITH NUTS & LOCKWASHERS.  
4- NO. 14 X 1/4" O.H. SHEET METAL SCREWS.  
ALL SCREWS AND LOCKWASHERS TO BE ZINC COATED.
- PAINT ALL CORNERS OF SHEET METAL BEADS WHERE GALVANIZING IS CRACKED OR LOOSE. THE PAINT SHALL BE ALUMINUM IN ACCORDANCE WITH FEDERAL SPECIFICATION TT-A-468 OF THE LATEST ISSUE IN EFFECT.

NO.	REVISIONS	DATE	CHANGED BY	REASON

FEDERAL AVIATION AGENCY  
AVIATION FACILITIES SERVICE  
SYSTEMS EQUIPMENT DIVISION  
PLANT ENGINEERING BRANCH  
WASHINGTON 25, DC

### HOOD, HV-1A TYPE SHOP DETAILS

DESIGNED BY <i>[Signature]</i>	CHECKED BY <i>[Signature]</i>
DATE 1-25-58	DATE 1-25-58
BY R. J. BLAIR	BY R. J. BLAIR



ITEM NO.	QTY	DESCRIPTION
1	2	POLES, WOOD, 80 FT. LONG, CLASS 3, FULL LENGTH, PRESSURE TREATED, PAINTABLE.
2	10	STEPS, POLE DETACHABLE, GALV, HUBBARD NO. 7235. (LAG AND PLATE) AND NO. 7236 STEP, GALV.
3	16	STEPS, POLE, HOOK HEAD 5/8" x 9", GALV, HUBBARD NO. 7124.
4	2	ANGLE THIMBLEYE, HUBBARD #100 FOR 1/2" BOLT, GALV.
5	1	BRACKET, 10 GA. x 1/2" STEEL FLAT, GALV. (AS SHOWN).
6	2	ANCHORS, GUY, STEEL WING, CIVAL EYE, 3/4" x 5/8" FT. GALV. HUBBARD NO. 7526-A.
7	2	TURNBUCKLES, EYE & CLEVIS, 1/2" x 12 HUBBARD # 6713, GALV.
8	10	STRAND, STEEL 3/4, GUY, SIEMENS-MARTIN - GALV. CLASS "A" COATING OR BETTER.
9	24	CLIPS FOR 1/2" WIRE ROPE, HUBBARD # 7481, GALV.
10	4	INSULATORS, GUY, PORCELAIN, 1 3/4" HOLES, HUBBARD NO. 506.
11	2	TERMINAL LUG, (AS SHOWN)
12	2	CROSSARMS, WOOD, 8" - 0", STANDARD 3/4" x 4 1/4" CREOSOTED.
13	4	BRACES, CROSSARM, FLAT, 7/8" x 1 1/2" x 13" GALV. HUBBARD NO. 8032.
14	6	BOLTS, CLEVIS, 3/8" x 1 1/4" HUBBARD NO. 6814, GALV. WITH NUT
15	2	WASHERS, CURVED, 2 1/2" x 2 1/2", HUBBARD NO. 7822, GALV.
16	10	WASHERS, SQUARE, 2" x 2", HUBBARD NO. 7812, GALV.
17	3	TURNBUCKLES, EYE & CLEVIS, 1/2" x 9" HUBBARD #6443, GALV.
18	7	INSULATOR, ANTENNA, LAPP INSULATOR CO. #43806 P12, 12 INCH.
19	7	SHACKLES, DROP FORGED STEEL 2" x 1 1/2" WITH 3/8" DIA. PIN GALV., HUBBARD NO. 6793.
20	9	THIMBLES, FOR 3/4" WIRE ROPE, GALVANIZED - HUBBARD #7593.
21	19	CONNECTORS, COPPER, KEARNEY NO. 840-2.
22	20	20 FT. WIRE, ANTENNA #4 STRANDED SILICON BRONZE OR EQUAL.
23	1	BOLT, CLEVIS, 3/8" x 1 1/2" HUBBARD NO. 6805 GALV. WITH NUT
24	1	POST, WOOD, 4 x 4 x 12 FT. LONG, DOUGLAS FIR OR EQUAL - PRESSURE TREATED.
25	2	LAG SCREWS, 1/2" x 3", GALV.
26	4	NUTS, HEX. 3/8" GALV.
27	2	BOWL INSULATOR, LOCKE NO. 24107 WITH GALV. 1/2" x 1 1/2" STUD BOLT.
28	1	ARCING HORNS, 3/4" O.D. COPPER TUBING (FABRICATE AS SHOWN)
33	2	GUY WIRE PROTECTOR WITH 2 1/2" BOLTS - HUBBARD #1558
30	1	BOLT, 1/2" x 1 1/2" WITH NUT, LOCK WASHER, 2 PLAIN WASHERS - GALV. BRASS
30	4	CARRIAGE BOLT, 3/8" x 4", GALV.
31	12	SERVIS LEEVYS #7453 HUBBARD GALV.
32	17	SERVIS LEEVYS #7452 HUBBARD GALV.

* GOVERNMENT FURNISHED		
7	ADDITIONAL INSULATOR IN SECT. A-A	11-2045
6	CHANGED NOTES, PARTS LIST, AND CONNECTIONS OF 21, 32 IN PLAN VIEW, ALSO IN SPARK GAP ELEVATION. NOTED SECTION B-B.	7-10-61
5	REVISED, SECT. A-A, ADDED NOTE	4-15-60
4	AS PER REGIONAL SUGGESTION - MINOR REVISIONS	9-14-59
3	ROTATED POLE STEPS 90°	1-18-58
2	REDRAWN AND MINOR REVISIONS	7-23-56
1	MINOR REVISIONS	8-21-57

REVISIONS

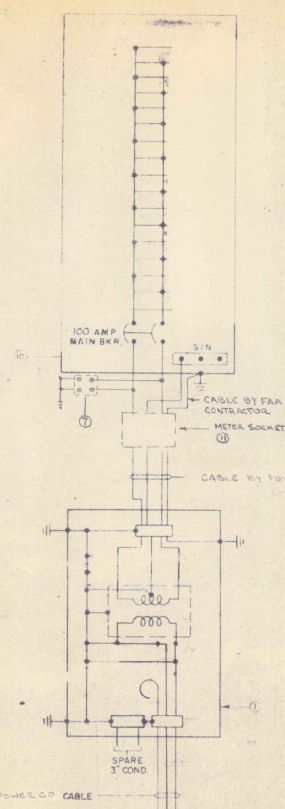
CIVIL AERONAUTICS ADMINISTRATION  
OFFICE OF FEDERAL AIRWAYS  
ESTABLISHMENT ENGINEERING DIVISION

DATE APPROVED

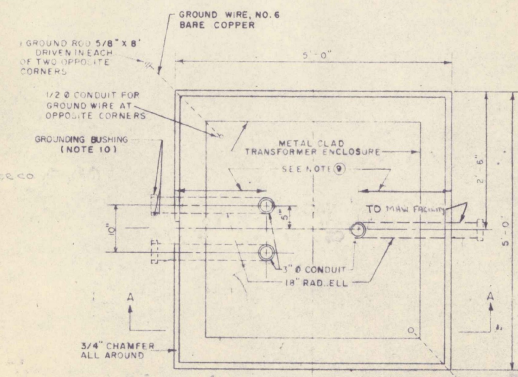
**INSTRUMENT LANDING SYSTEM  
COMPASS LOCATOR - FLAT TOP TYPE T  
ANTENNA DETAILS & ERECTION**

454A

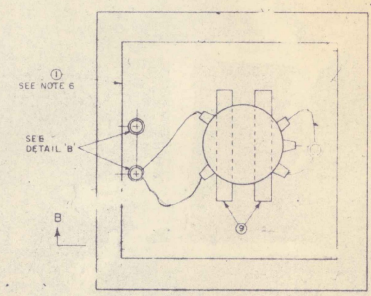
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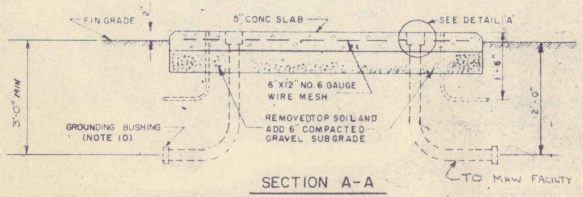
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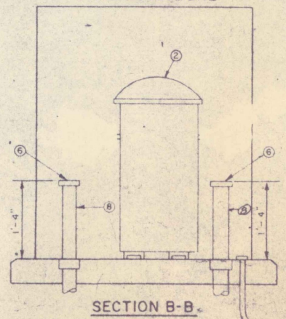
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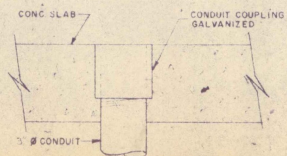
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TRANSCLASURE



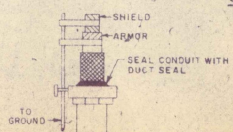
SECTION A-A



SECTION B-B



DETAIL 'A'



DETAIL 'B'

EQUIPMENT LIST

- \* ① TRANSCLASURE 54" X 54" X 71" H
- ② TRANSFORMERS 2400-120/240 VOLTS 10 KVA  
FURNISHED AND INSTALLED BY POWER CO.
- ③ INSULATING BUSHING GROUNDING TYPE O2 BL3104 OR EQUAL
- ④ LOW VOLTAGE LIGHTING ARRESTOR 120/240 V
- ⑤ 3" CONDUIT GALVANIZED STEEL
- ⑥ SUPPORT CHANNEL 3" X 3" X 4"
- \* ⑦ DISTRIBUTION PANEL 120/240, 30 AMP MAIN BREAKER
- ⑧ THIS METEOR SOCKET AVAILABLE FROM POWER CO.

\* GOVERNMENT FURNISHED EQUIPMENT.

NOTES

- 1. ALL ELECTRICAL WORK SHALL CONFORM TO THE NATIONAL ELECTRIC CODE AND LOCAL REGULATIONS.
- 2. GROUND ALL NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT USING #6 BARE COPPER WIRE. USE SPLIT BOLT CONNECTORS AND GROUNDING LUGS FOR THE ABOVE UNLESS OTHERWISE SPECIFIED.
- 3. ALL GROUND WIRE FOLLOWING STEEL FRAME SHALL BE FASTENED AT LEAST EVERY 18" AND WITHIN 6" FROM BEND OR JUNCTION. THE SHAPING OF GROUND WIRE SHALL FOLLOW PARALLEL OR PERPENDICULAR TO ALL SURFACES.
- 4. CONDUCTORS TO THE CABLE FEEDER FROM METEOR SOCKET TO DISTRIBUTION PANEL TO BE CONFORMED WITH POWER REQUIREMENTS.
- 5. ALL CONDUIT FITTINGS, NUTS, BOLTS AND STEELWORK SHALL BE GALVANIZED.
- 6. STENCIL THE FOLLOWING ON HINGED DOORS IN "L" LETTERS "TO DE-ENERGIZE TRANSFORMER, CUTOUT MUST BE OPEN."
- 7. THE 1/2" CONDUITS FOR THE GROUND WIRE SHALL TERMINATE AT PAD LEVEL WITH BUSHING.
- 8. GROUND RESISTANCE SHALL NOT EXCEED 10 OHMS. ADDITIONAL GROUND RODS SHALL BE INSTALLED IF NECESSARY TO MEET THIS REQUIREMENT.
- 9. DUE TO DIFFERENT SIZES OF TRANSFORMERS AND ENCLOSURES THE DIMENSION FOR PLACEMENT OF CONDUIT SHALL BE DETERMINED IN FIELD.
- 10. SPARE CONDUIT SHALL BE CAPPED ON BOTH ENDS.
- 11. SEE DR. NO. 14-B-20578, SHEETS 1, 2, FOR LOCATION AND LAYOUT.

DRAWING NOT TO SCALE

DESIGNED BY	DATE	IN CHARGE	DATE
DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION			
XFMR. AND WIRING DIAGRAM			
APPROVED BY	DATE	PROJECT NO.	DATE
E.A.-442		EA-D-24852	

BGP