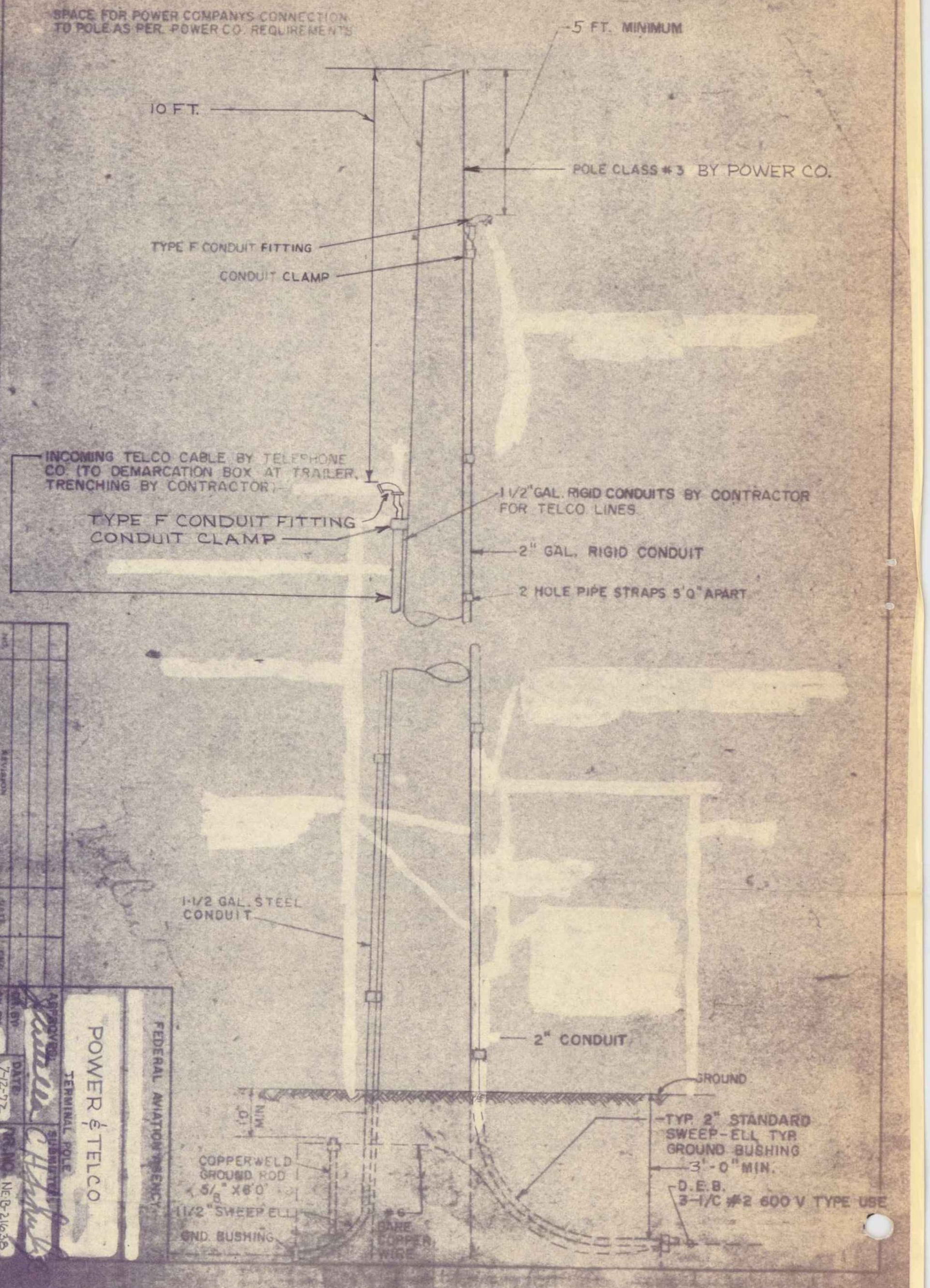
IN FILE

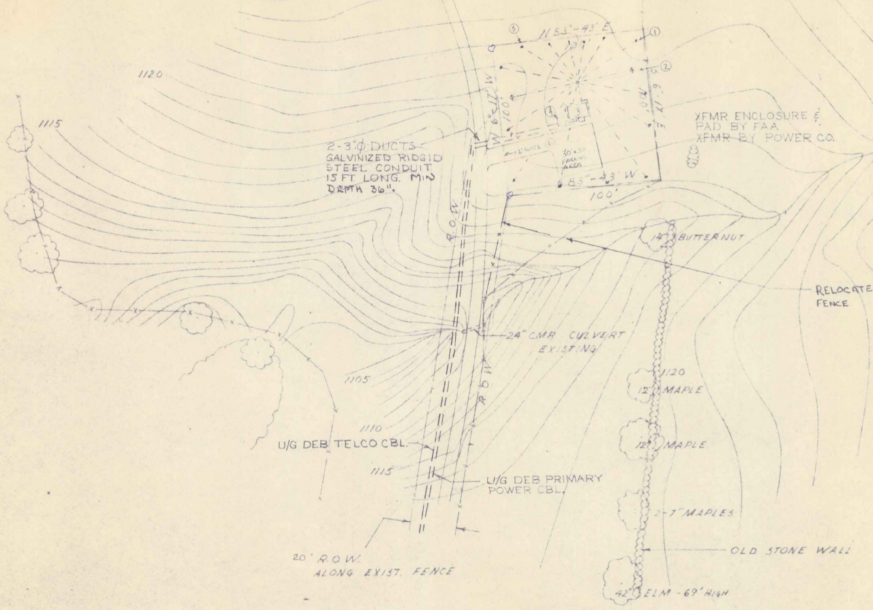
NOTE: ALL MATERIAL SUPPLIED AND INSTALLED BY CONTRACTOR UNLESS OTHERWISE SPECIFIED.
ALL STEEL HARDWARE AND EQUIPMENT SHALL BE GALVANIZED.

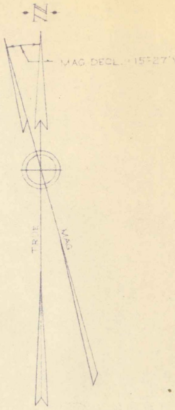

SPACE FOR POWER COMPANYS CONNECTION TO POLE AS PER POWER CO. REQUIREMENTS
5 FT. MINIMUM
10 FT.
POLE CLASS # 3 BY POWER CO.
TYPE F CONDUIT FITTING
CONDUIT CLAMP
INCOMING TELCO CABLE BY TELEPHONE CO. (TO DEMARCATION BOX AT TRAILER, TRENCHING BY CONTRACTOR)
TYPE F CONDUIT FITTING
CONDUIT CLAMP
1 1/2" GAL. RIGID CONDUITS BY CONTRACTOR FOR TELCO LINES
2" GAL. RIGID CONDUIT
2 HOLE PIPE STRAPS 5'0" APART
1-1/2 GAL. STEEL CONDUIT
2" CONDUIT
GROUND
1'0" MIN.
TYP. 2" STANDARD SWEEP-ELL TYP. GROUND BUSHING
3'-0" MIN.
D.E.B.
3-1/C #2 600 V TYPE USE
COPPERWELD GROUND ROD 5/8" X 6'0"
1 1/2" SWEEP ELL
GND. BUSHING
#6 BARE COPPER WIRE
NO.
REVISION
DATE
CKD.

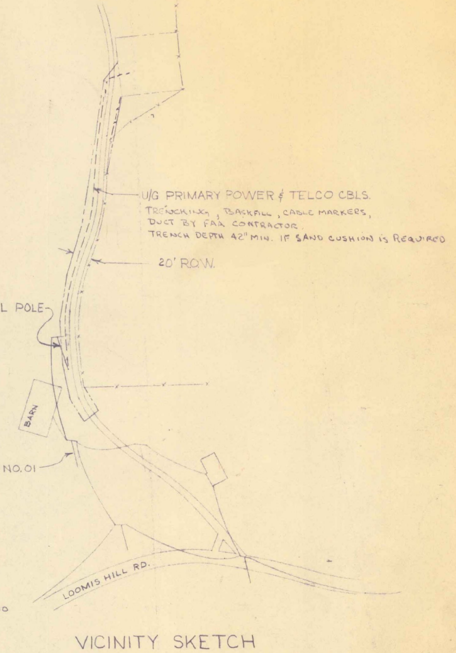
FEDERAL AVIATION AGENCY

POWER & TELCO
TERMINAL POLE

DR. BY	APPROVED
CK. BY	
DATE 7-12-72	SUBMITTED
DWG. NO. NE-B-21638	


1125
1120
1115
1110
1105
1115
1120
1125
③
①
②
N 83°-43' E
100'
W 6°-17' W
100'
E 6°-17' W
100'
S 83°-43' W
100'
④
③
⑥
12' GATE
30'x30' PARKING AREA
XFMR ENCLOSURE & PAD BY FAA
XFMR BY POWER CO.
2-3"Ø DUCTS GALVINIZED RIDGID STEEL CONDUIT 15 FT LONG. MIN DEPTH 36".
R.O.W.
R.O.W.
14" BUTTERNUT
RELOCATE FENCE
24" CMR CULVERT EXISTING
12" MAPLE
12" MAPLE
2-7" MAPLES
U/G DEB TELCO CBL.
U/G DEB PRIMARY POWER CBL.
OLD STONE WALL
20' R.O.W. ALONG EXIST. FENCE
42" ELM - 69' HIGH


TN
MAG DECL. 15°-27' W
TRUE
MAG


U/G PRIMARY POWER & TELCO CBLS.
TRENCHING, BACKFILL, CABLE MARKERS, DUCT BY FAA CONTRACTOR.
TRENCH DEPTH 42" MIN. IF SAND CUSHION is REQUIRED
20' R.O.W.
TERMINAL POLE
BARN
EXIST. TERMINAL POLE NO. 01
LOOMIS HILL RD.

LEGEND

① GROUND RADIAL SYSTEM SEE DRAWING NE-D-21598 (SH.2)
② FLAT TOP ANTENNA SEE DRAWINGS NE-D-21598 (2), D-4898
③ 8'x12' EQUIPMENT SHELTER SEE DRAWING NE-D-21598(2) & NE-D-21610
④ TRANSFORMER ENCLOSURE SEE DRAWIND EA-D-24852.
⑤ CLASS "C" SEE DRAWING 566
⑥ GRAVEL SURFACE ROAD & PARKING AREA

NOTE

1 THE RESIDENT ENGINEER SHALL STAKE OUT THE CABLE TRENCH

VICINITY SKETCH

SCALE: 1" = 100'

100 0 100 200

PLOT LAYOUT

SCALE: 1" = 40'

0 20 40 60 80 100

REV. LTR.	DATE	DESCRIPTION	CHECKED	APPROVED

FEDERAL AVIATION ADMINISTRATION
EASTERN REGION NEW YORK. N.Y.

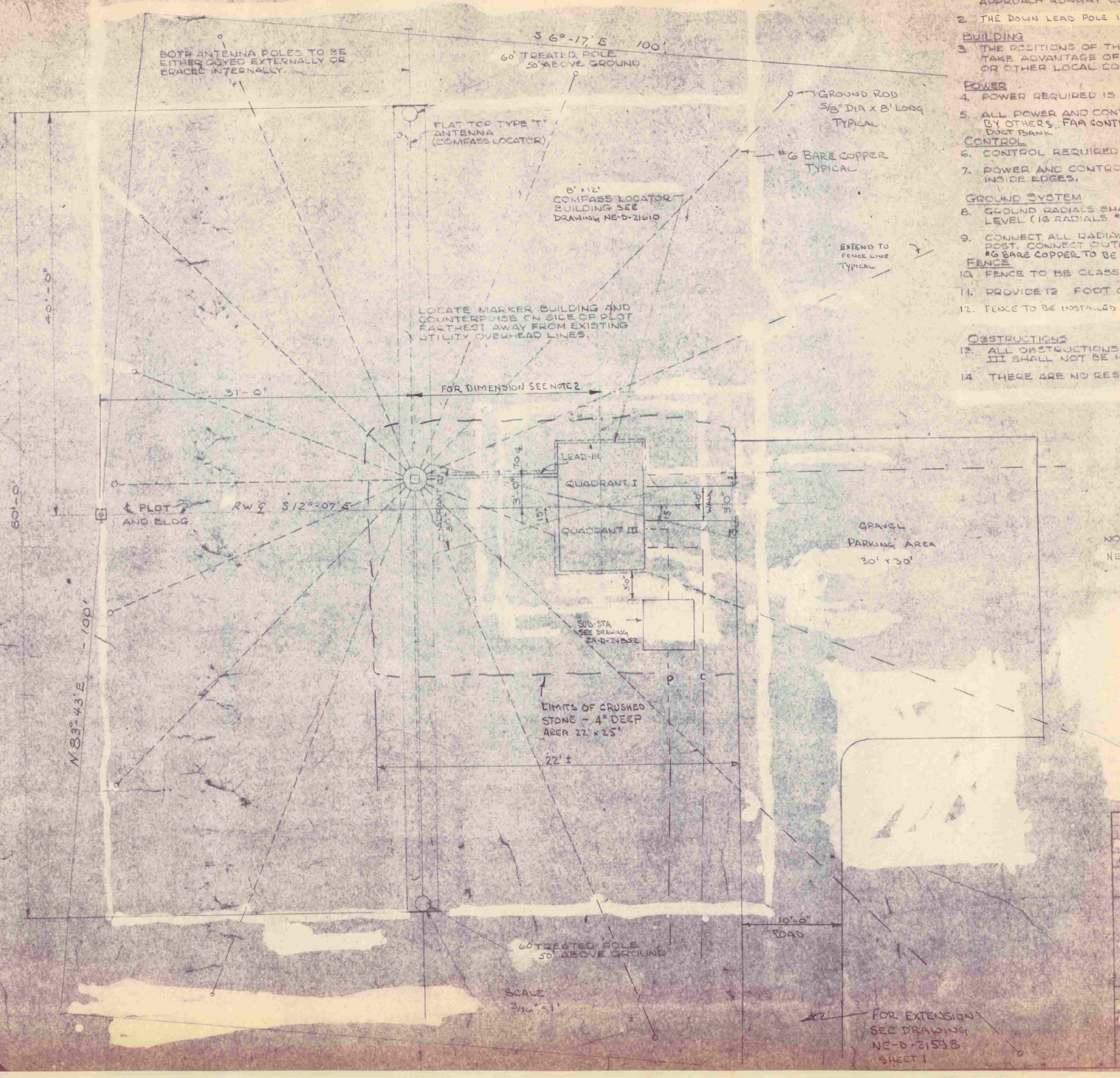
MONTPELIER, VT.
BARRE-MONTPELIER STATE AIRPORT
ILS R/W 17
COMPASS LOCATOR VICINITY SKETCH

REVIEWED BY
SUBMITTED BY J. Castilla
APPROVED BY C H Schulze
DESIGNED BY
DRAWN BY
CHECKED BY
ISSUED BY
DATE 6-13-72
DRAWING NO. NE-D-21598
REV. LTR.

SHEET 1 OF 3

EF KNAPP
COMPASS LOCATOR
VICINITY SKETCH

5-16


S 6°-17' E 100'
BOTH ANTENNA POLES TO BE EITHER GUYED EXTERNALLY OR BRACED INTERNALLY.
60' TREATED POLE 50' ABOVE GROUND
GROUND ROD 5/8" DIA x 8' LONG TYPICAL
FLAT TOP TYPE "T" ANTENNA (COMPASS LOCATOR)
#6 BARE COPPER TYPICAL
8' x 12' COMPASS LOCATOR BUILDING SEE DRAWING NE-D-21610
EXTEND TO FENCE LINE TYPICAL
40'-0"
LOCATE MARKER BUILDING AND COUNTERPOISE ON SIDE OF PLOT FARTHEST AWAY FROM EXISTING UTILITY OVERHEAD LINES.
31'-0"
FOR DIMENSION SEE NOTE 2
LEAD-IN
QUADRANT I
QUADRANT III
QUADRANT II
30°
3'-0" TO ℄
15°
4'-0" WALK
30'
80'-0"
℄ PLOT AND BLDG.
RW ℄ S 12°-07' E
GRAVEL PARKING AREA 30' x 30'
3'-0"
SUB-STA SEE DRAWING EA-D-24852
P
C
N 83°-43' E - 100'
LIMITS OF CRUSHED STONE - 4" DEEP AREA 22' x 25'
22' ±
10'-0" ROAD
60' TREATED POLE 50' ABOVE GROUND
SCALE 3/16" = 1'
FOR EXTENSION SEE DRAWING NE-D-21598 SHEET 1

NOTES

SITE

1. THE PLOT TO BE ORIENTED SO BEARING OF THE PLOT CENTERLINE (THRU CENTER OF COUNTERPOISE) IS THE SAME AS THE BEARING OF THE INSTRUMENT APPROACH RUNWAY CENTERLINE.
2. THE DOWN LEAD POLE IS TO BE LOCATED 9FT 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

CONTROL

6. CONTROL REQUIRED IS A TWO CONDUCTOR METALLIC CIRCUIT.
7. POWER AND CONTROL LINES MAY BE IN SAME TRENCH IF SEPARATED 12" INSIDE EDGES.

GROUND SYSTEM

8. GROUND RADIALS SHALL BE BURIED 12 INCHES MINIMUM BELOW GROUND LEVEL (16 RADIALS #6 BARE - MAY USE CABLE PLOW).
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 98' x 98'

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

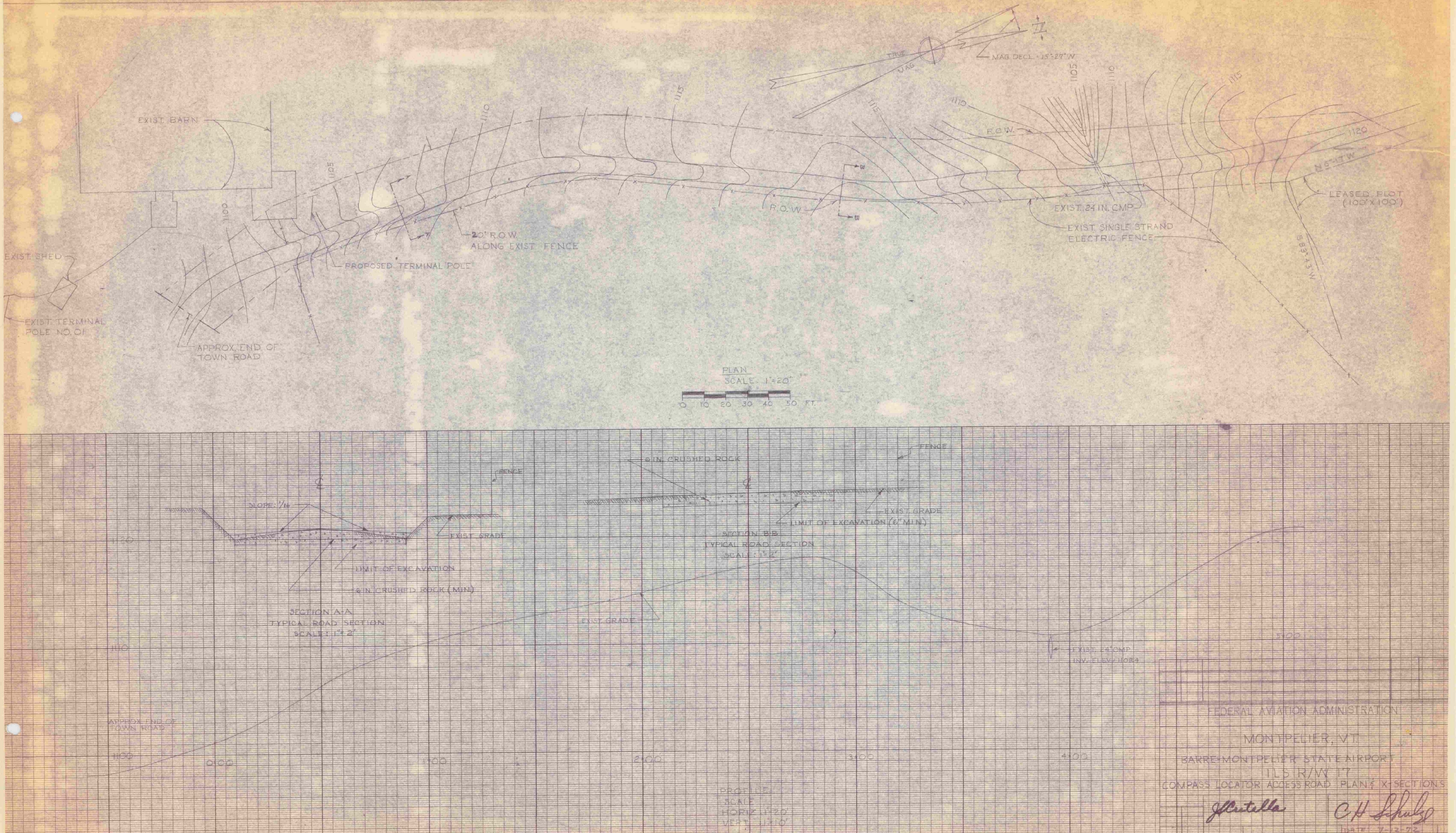
NO. 566 CLASS "C" FENCE (WOOD POSTS.)
NE-D-21598 COMPASS LOCATOR VICINITY SKETCH

REV.	DATE	DESCRIPTION	CHECKED	APPROVED

FEDERAL AVIATION AGENCY
WASHINGTON 25, D.C.

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

REVIEWED BY
SUBMITTED BY J. Stitella
APPROVED BY C H Schulze
DRAWN BY
TRACED BY
CHECKED BY
DATE: 7-12-72
NE-D-21598
SHEET 2


TRUE
MAG
MAG. DECL. 15°-27' W
EXIST. BARN
1100
1105
1110
1115
1120
R.O.W.
N 6°17' W
LEASED PLOT (100' X 100')
EXIST. 24 IN. CMP
EXIST. SINGLE STRAND ELECTRIC FENCE
S 83°43' W
20' R.O.W. ALONG EXIST. FENCE
PROPOSED TERMINAL POLE
EXIST. SHED
EXIST. TERMINAL POLE NO. 01
APPROX. END OF TOWN ROAD
PLAN
SCALE: 1"=20'
0 10 20 30 40 50 FT.
FENCE
6 IN. CRUSHED ROCK
SLOPE: 1/16
EXIST. GRADE
LIMIT OF EXCAVATION (6" MIN.)
SECTION B-B
TYPICAL ROAD SECTION
SCALE: 1"=2'
LIMIT OF EXCAVATION
6 IN. CRUSHED ROCK (MIN)
SECTION A-A
TYPICAL ROAD SECTION
SCALE: 1"=2'
EXIST. GRADE
EXIST. 24" CMP
INV. ELEV. 1108.4
APPROX. END OF TOWN ROAD
1120
1110
1100
0+00
1+00
2+00
3+00
4+00
5+00
PROFILE
SCALE
HORIZ. 1"=20'
VERT. 1"=10'

FEDERAL AVIATION ADMINISTRATION

MONTPELIER, VT.

BARRE-MONTPELIER STATE AIRPORT
ILS R/W 17
COMPASS LOCATOR ACCESS ROAD PLAN & X-SECTIONS

J Cutella

C H Schulz

DATE: 7-12-72

NE-D-21598

Sheet 3 of 5

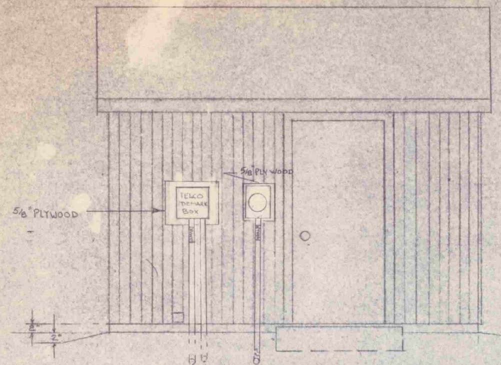
KEUFFEL & ESSER CO.
NEW YORK

TRADE STANDARD MARK
REG. U.S. PAT. OFF.
PROFILE PLATE A 4 X 20
100% RAG PAPER
MADE IN U.S.A.

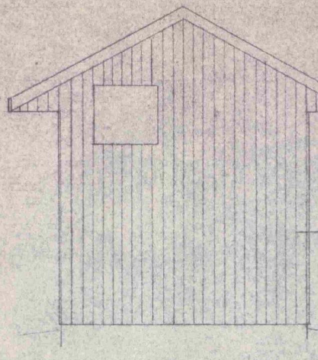
KEUFFEL & ESSER CO.
NEW YORK

TRADE STANDARD MARK
REG. U.S. PAT. OFF.
PROFILE PLATE A 4 X 20
100% RAG PAPER
MADE IN U.S.A.

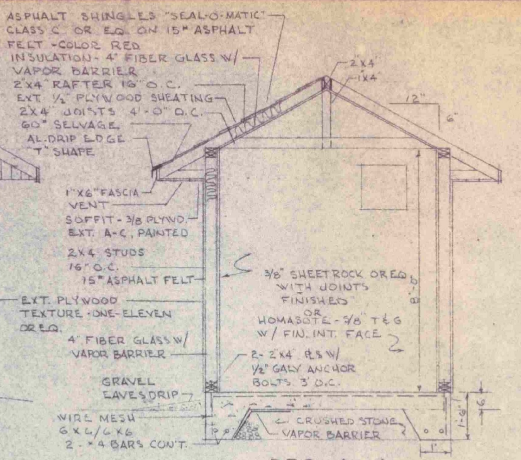
KEUFFEL & ESSER CO.
NEW YORK


5/8" PLYWOOD
TELCO DEMARK BOX
5/8" PLYWOOD
2"
2"

FRONT ELEV.



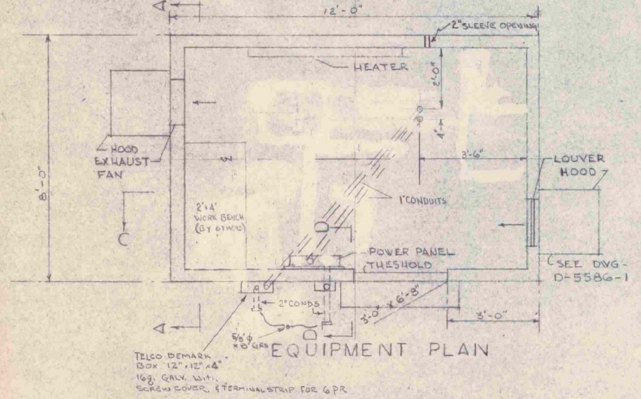
LEFT ELEV.


ASPHALT SHINGLES "SEAL-O-MATIC" CLASS C OR EQ. ON 15# ASPHALT FELT - COLOR RED
INSULATION - 4" FIBER GLASS W/ VAPOR BARRIER
2"X4" RAFTER 16" O.C.
EXT. 1/2" PLYWOOD SHEATING
2X4" JOISTS 4'-0" O.C.
60# SELVAGE
AL. DRIP EDGE "T" SHAPE
2X4
1X4
12"
6"
1"X6" FASCIA
VENT
SOFFIT - 3/8 PLYWD. EXT. A-C, PAINTED
2X4 STUDS 16" O.C.
15# ASPHALT FELT
3/8" SHEETROCK OR EQ. WITH JOINTS FINISHED OR HOMASOTE - 5/8" T&G W/ FIN. INT. FACE
8'-0"
EXT. PLYWOOD TEXTURE - ONE - ELEVEN OR EQ.
4" FIBER GLASS W/ VAPOR BARRIER
2 - 2"X4" PLS W/ 1/2" GALV ANCHOR BOLTS 3' O.C.
GRAVEL EAVESDRIP
WIRE MESH 6X6/6X6
2 - #4 BARS CON'T.
CRUSHED STONE
VAPOR BARRIER
6"
1'-6"
1'

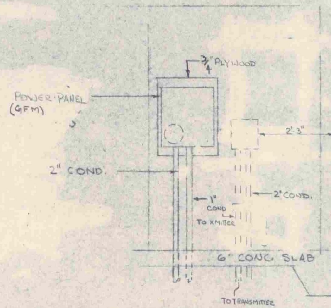
SEC. A-A

NOTES

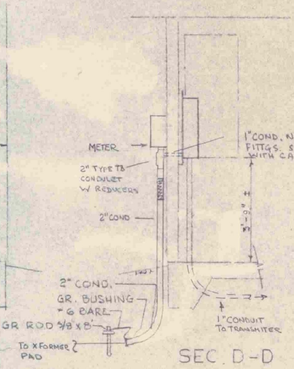
1. ELECTRICAL WIRING SHALL CONFORM TO SPEC F.A.A-1217 & NATIONAL ELECT CODE.
2. MOUNT ARRESTER IN BUILDING, CONNECT TO INCOMING SERVICE.
3. 2" CONDUIT RISERS SHALL INCLUDE FLEX. COND.
4. ALL CONDUIT TERMINATED IN BOXES, PANELS SHALL HAVE DOUBLE LOCKNUTS & BUSHINGS.
5. ALL UNDERGROUND CONDUITS TERMINATE WITH GROUNDING BUSHINGS.
6. METER TO BE INSTALLED BY POWER 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.


A
12'-0"
2" SLEEVE OPENING
HEATER
2'-0"
4'
3'-6"
HOOD EXHAUST FAN
8'-0"
C
2'x4' WORK BENCH (BY OTHERS)
1" CONDUITS
LOUVER HOOD
POWER PANEL
THESHOLD
SEE DWG - D-5586-1
2" CONDS
3'-0" x 6'-8"
3'-0"
5/8" ϕ x 8' GRD
A
TELCO DEMARK BOX 12" x 12" x 4" 16g. GALV. WITH SCREW COVER, & TERMINAL STRIP FOR 6 PR

EQUIPMENT PLAN


3/4" PLYWOOD
POWER PANEL (GFM)
2'-3"
2" COND.
2" COND.
1" COND TO XMITTER
6" CONC. SLAB
TO TRANSMITTER

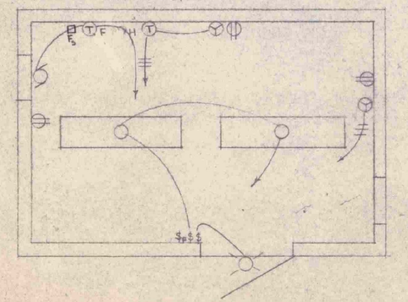
SEC. C-C


METER
1" COND. NIPPLE & FITTGS. SEAL OPENING WITH CAULKING
2" TYPE TB CONDULET W REDUCERS
2" COND
5'-0"
2" COND.
GR. BUSHING
#6 BARE
GR ROD 5/8 x 8'
TO XFORMER PAD
1" CONDUIT TO TRANSMITTER

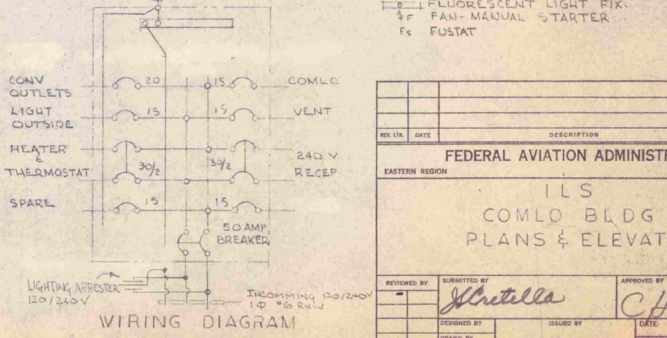
SEC. D-D

LEGEND

- ⊖ DUPLEX REC 4' ABOVE FLOOR.
- Ⓨ 240V REC 4' ABOVE FLOOR
- Ⓣ F THERMOSTAT - FAN
- Ⓣ H THERMOSTAT - HEATER
- $ LIGHT SWITCH 4'-6" ABOVE FLOOR
- ☼ LIGHT FIXTURE - EXT.
- ⊟ FLUORESCENT LIGHT FIX.
- $F FAN - MANUAL STARTER
- Fs FUSTAT



ELECT. PLAN


CONV OUTLETS
20
15
COMLO
LIGHT OUTSIDE
15
15
VENT
HEATER & THERMOSTAT
30/2
30/2
240 V RECEP
SPARE
15
15
50 AMP BREAKER
LIGHTING ARRESTER 120/240V
INCOMMING 120/240V 1Φ #6 RHW

WIRING DIAGRAM

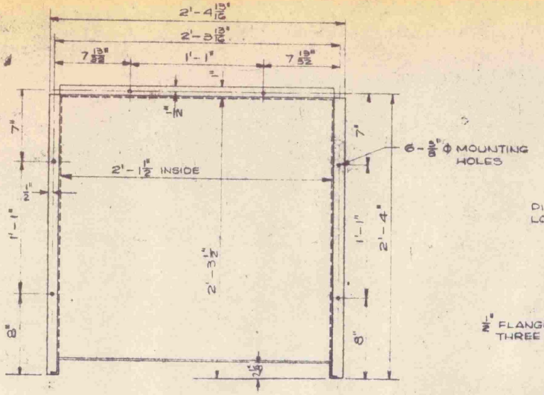
REV. LTR.	DATE	DESCRIPTION	CHECKED	APPROVED

FEDERAL AVIATION ADMINISTRATION
EASTERN REGION NEW YORK, N.Y.

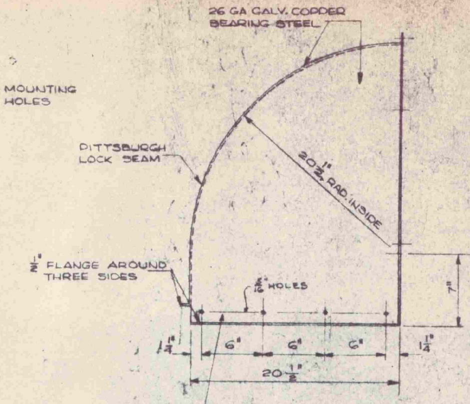
ILS
COMLO BLDG
PLANS & ELEVATIONS

REVIEWED BY
SUBMITTED BY J Cretella
APPROVED BY C H Schulze
DESIGNED BY
DRAWN BY
CHECKED BY
ISSUED BY NE-436
DATE 7-5-72
DRAWING NO. NE-D-21610
REV. LTR.

DEFIANCE NO. 1025 58143


2'-4 13/16"
2'-3 13/16"
7 13/32"
1'-1"
7 13/32"
7"
1/2" IN
7"
6-5/8" ϕ MOUNTING HOLES
2'-1 1/2" INSIDE
2'-3 1/2"
1'-1"
1'-1"
2'-4"
8"
8"
5/8"

FRONT VIEW

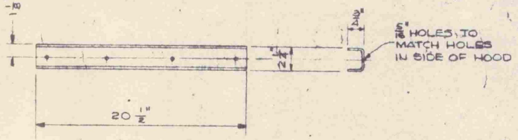

26 GA GALV. COPPER BEARING STEEL
PITTSBURGH LOCK SEAM
20 3/4" RAD. INSIDE
1/2" FLANGE AROUND THREE SIDES
5/16" HOLES
7"
1 1/4"
6"
6"
6"
1 1/4"
20 1/2"

SIDE VIEW

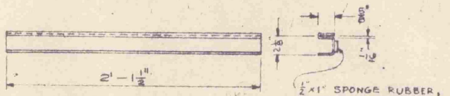
① FASTEN SIDE GUIDES TO SIDE PIECES OF HOOD WITH 1/4" R.H. SCREWS, NUTS & LOCKWASHERS. NUTS OUTSIDE.

NOTES

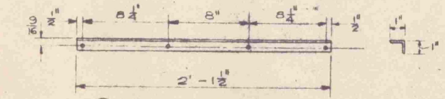
1. HOOD SHALL BE SHIPPED KNOCKED DOWN FOR FIELD ASSEMBLY.
2. HOOD SHALL ACCOMODATE ONE 19 3/4" × 24 3/4" × 2" FILTER TO BE SUPPLIED BY OTHERS.
3. MAKE 1/2" HEM ON ALL FLANGES OF HOOD.
4. EACH COMPLETE HOOD SHALL BE PACKED IN A CARDBOARD CARTON SUITABLE FOR DOMESTIC SHIPMENT. EACH CARTON SHALL CONTAIN 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).
5. TOLERANCE FOR HOLE DIMENSIONS AND FOR ASSEMBLED HOOD DIMENSIONS IS ± 1/16".
6. A PROTECTIVE SHEET METAL STRIP SHALL BE PLACED IN EACH UNASSEMBLED LOCK SEAM JOINT TO PREVENT DAMAGE DURING HANDLING AND SHIPPING.
7. FURNISH THE FOLLOWING WITH EACH HOOD:
   6-1/4" × 2 1/2" R.H. MACHINE SCREWS WITH NUTS & LOCKWASHERS.
   4-NO. 14 × 3/4" R.H SHEET METAL SCREWS.
   ALL SCREWS AND LOCKWASHERS TO BE ZINC COATED.
8. PAINT ALL CORNERS OF SHEET METAL BENDS WHERE GALVANIZING IS CRACKED OR LOOSENED. THE PAINT SHALL BE ALUMINUM IN ACCORDANCE WITH FEDERAL SPECIFICATION TT-A-468 OF THE LATEST ISSUE IN EFFECT.


1/2"
5/16" HOLES TO MATCH HOLES IN SIDE OF HOOD
2 1/4"
20 1/2"

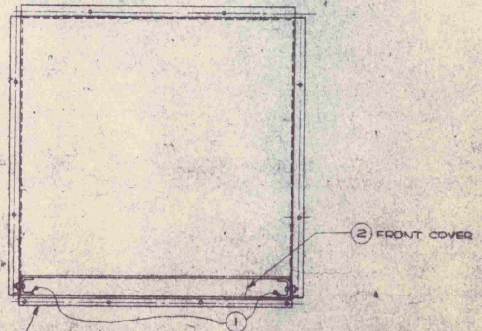
① SIDE FILTER GUIDE
16 GA. GALV.
2 REQ.


2'-1 1/2"
1/2" × 1" SPONGE RUBBER, CEMENT TO SURFACE

② FRONT COVER
16 GA. GALV.
1 REQ.


1/2"
8 1/4"
8"
8 1/4"
1/2"
1"
1"
2'-1 1/2"

③ REAR FILTER SUPPORT
16 GA. GALV.
1 REQ.


② FRONT COVER
①

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

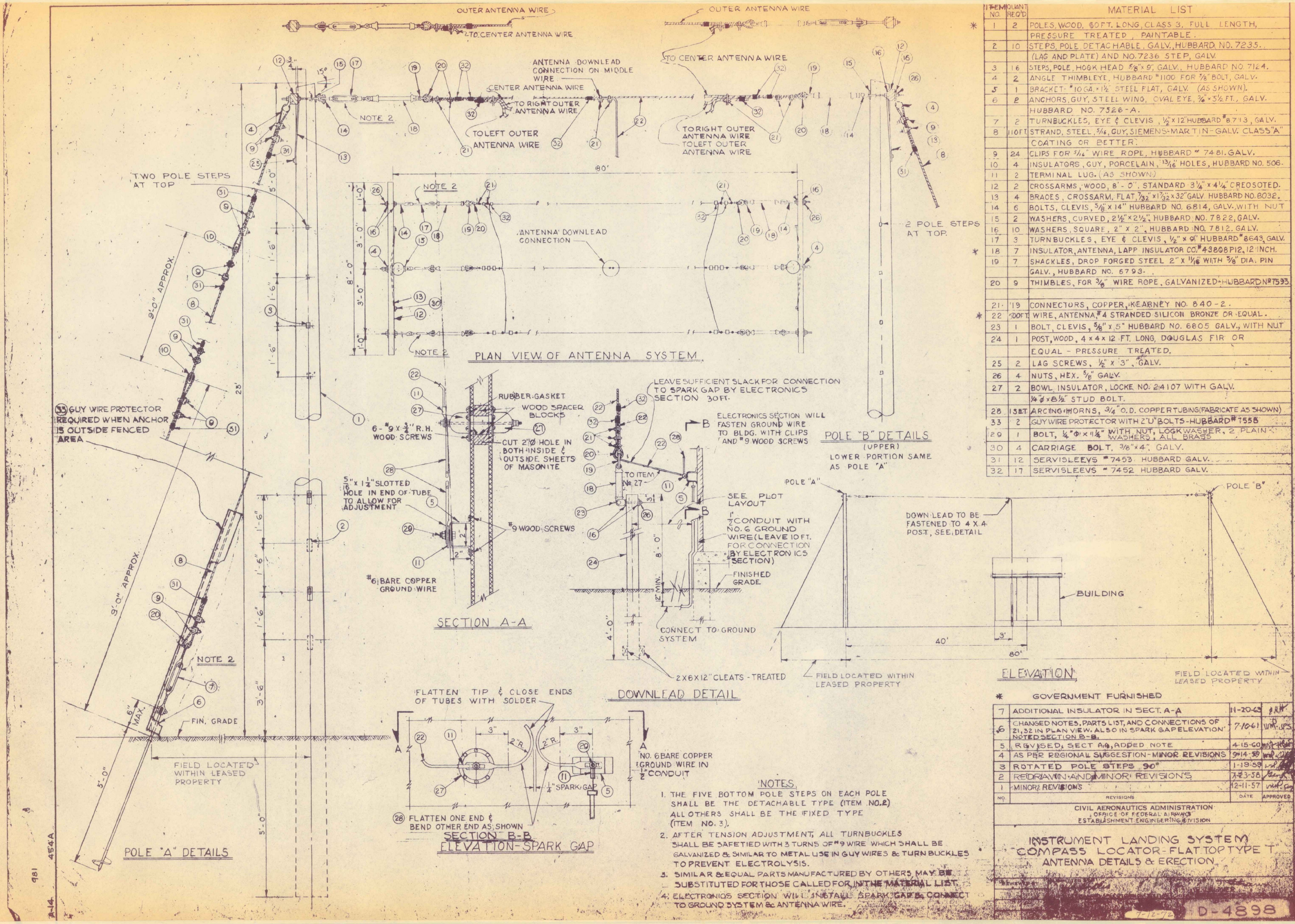
ASSEMBLY VIEW

NO	REVISIONS	DATE	CHECKED	SECTION

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

HOOD, HV-1A TYPE
SHOP DETAILS

REVIEWED BY: 4FS
SUBMITTED BY: O. L. Braudenburg, CHIEF DESIGN SECTION
APPROVED BY: R. J. ALPHER, CHIEF PLANT ENGINEERING BRANCH
DESIGNED:
DRAWN: E.J.D.
DATE: 9-15-61
DP D-6586-1


OUTER ANTENNA WIRE
TO CENTER ANTENNA WIRE
OUTER ANTENNA WIRE
TO CENTER ANTENNA WIRE
ANTENNA DOWNLEAD CONNECTION ON MIDDLE WIRE
CENTER ANTENNA WIRE
TO RIGHT OUTER ANTENNA WIRE
TO LEFT OUTER ANTENNA WIRE
TO RIGHT OUTER ANTENNA WIRE
TO LEFT OUTER ANTENNA WIRE
NOTE 2
15°
3/4"
TWO POLE STEPS AT TOP
5'-0"
1'-6"
1'-6"
1'-6"
9'-0" APPROX.
25'
33 GUY WIRE PROTECTOR REQUIRED WHEN ANCHOR IS OUTSIDE FENCED AREA
80'
1'-0"
3'-0"
8'-0"
3'-0"
1'-0"
ANTENNA DOWNLEAD CONNECTION
NOTE 2
PLAN VIEW OF ANTENNA SYSTEM
2 POLE STEPS AT TOP
RUBBER GASKET
WOOD SPACER BLOCKS
6-#9 X 3/4" R.H. WOOD SCREWS
CUT 2"Ø HOLE IN BOTH INSIDE & OUTSIDE SHEETS OF MASONITE
5/16" x 1 1/4" SLOTTED HOLE IN END OF TUBE TO ALLOW FOR ADJUSTMENT
#9 WOOD SCREWS
2"
2"
#6 BARE COPPER GROUND WIRE
SECTION A-A
LEAVE SUFFICIENT SLACK FOR CONNECTION TO SPARK GAP BY ELECTRONICS SECTION 30FT.
ELECTRONICS SECTION WILL FASTEN GROUND WIRE TO BLDG. WITH CLIPS AND #9 WOOD SCREWS
B
TO ITEM № 27
3"
SEE PLOT LAYOUT
1/2" CONDUIT WITH NO. 6 GROUND WIRE (LEAVE 10 FT. FOR CONNECTION BY ELECTRONICS SECTION)
8'-0"
12" MIN.
4'-0"
FINISHED GRADE
CONNECT TO GROUND SYSTEM
2X6X12" CLEATS - TREATED
DOWNLEAD DETAIL
POLE "B" DETAILS
(UPPER)
LOWER PORTION SAME AS POLE "A"
POLE "A"
POLE "B"
DOWN LEAD TO BE FASTENED TO 4 X 4 POST, SEE DETAIL
BUILDING
40'
3'
80'
FIELD LOCATED WITHIN LEASED PROPERTY
FIELD LOCATED WITHIN LEASED PROPERTY
ELEVATION
NOTE 2
6" MAX.
FIN. GRADE
5'-0"
3'-6"
5'-0"
FIELD LOCATED WITHIN LEASED PROPERTY
POLE "A" DETAILS
FLATTEN TIP & CLOSE ENDS OF TUBES WITH SOLDER
A
3"
2"R.
2"R.
3"
A
1/4" SPARK GAP
NO. 6 BARE COPPER GROUND WIRE IN 1/2" CONDUIT
28 FLATTEN ONE END & BEND OTHER END AS SHOWN
SECTION B-B
ELEVATION-SPARK GAP
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25) (26) (27) (28) (29) (30) (31) (32) (33)
A-14
454A
981

ITEM NO.	QUANT REQ'D	MATERIAL LIST
* 1	2	POLES, WOOD, 60 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 #1100 FOR 5/8" BOLT, GALV.
5	1	BRACKET - #10 GA. x 1½" STEEL FLAT, GALV. (AS SHOWN).
6	2	ANCHORS, GUY, STEEL WING, OVAL EYE, 3/4" x 5½ FT., GALV. HUBBARD NO. 7526-A.
7	2	TURNBUCKLES, EYE & CLEVIS, ½" x 12" HUBBARD #8713, GALV.
8	110 FT.	STRAND, STEEL, 5/16, GUY, SIEMENS-MARTIN - GALV. CLASS "A" COATING OR BETTER.
9	24	CLIPS FOR 5/16" WIRE ROPE, HUBBARD # 7481. GALV.
10	4	INSULATORS, GUY, PORCELAIN, 13/16" HOLES, HUBBARD NO. 506.
11	2	TERMINAL LUG. (AS SHOWN)
12	2	CROSSARMS, WOOD, 8'-0". STANDARD 3¼" x 4¼" CREOSOTED.
13	4	BRACES, CROSSARM, FLAT, 7/32" x 1 7/32" x 32" GALV. HUBBARD NO. 8032.
14	6	BOLTS, CLEVIS, 5/8" x 14" HUBBARD NO. 6814, GALV., WITH NUT
15	2	WASHERS, CURVED, 2½" x 2½", HUBBARD NO. 7822, GALV.
16	10	WASHERS, SQUARE, 2" x 2", HUBBARD NO. 7812. GALV.
17	3	TURNBUCKLES, EYE & CLEVIS, ½" x 9" HUBBARD #8643, GALV.
* 18	7	INSULATOR, ANTENNA, LAPP INSULATOR CO. #43808 P12, 12 INCH.
19	7	SHACKLES, DROP FORGED STEEL 2" x 11/16" WITH 5/8" DIA. PIN GALV., HUBBARD NO. 6793.
20	9	THIMBLES, FOR 3/8" WIRE ROPE, GALVANIZED - HUBBARD № 7593.
21	19	CONNECTORS, COPPER, KEARNEY NO. 840-2.
* 22	500 FT.	WIRE, ANTENNA, #4 STRANDED SILICON BRONZE OR EQUAL.
23	1	BOLT, CLEVIS, 5/8" x 5" 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, ½" x 3", GALV.
26	4	NUTS, HEX. 5/8" GALV.
27	2	BOWL INSULATOR, LOCKE NO. 24107 WITH GALV. ¼"Ø x 8½" STUD BOLT.
28	1 SET	ARCING HORNS, 3/4" O.D. COPPER TUBING (FABRICATE AS SHOWN)
33	2	GUY WIRE PROTECTOR WITH 2 "U" BOLTS - HUBBARD # 7558
29	1	BOLT, ¼"Ø x 1¼" WITH NUT, LOCKWASHER, 2 PLAIN WASHERS, ALL BRASS
30	4	CARRIAGE BOLT, 3/8" x 4", GALV.
31	12	SERVISLEEVS #7453 HUBBARD GALV.
32	17	SERVISLEEVS #7452 HUBBARD GALV.

* GOVERNMENT FURNISHED

NO.	REVISIONS	DATE	APPROVED
7	ADDITIONAL INSULATOR IN SECT. A-A	11-20-63	J.R.H.
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	WMP. JPS
5	REVISED, SECT A-A, ADDED NOTE	4-15-60	[illegible]
4	AS PER REGIONAL SUGGESTION - MINOR REVISIONS	9-14-59	[illegible]
3	ROTATED POLE STEPS 90°	1-19-59	[illegible]
2	REDRAWN AND MINOR REVISIONS	7-23-58	[illegible]
1	MINOR REVISIONS	12-11-57	WMP

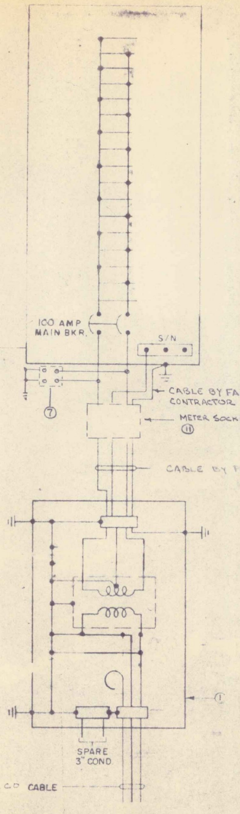
CIVIL AERONAUTICS ADMINISTRATION
OFFICE OF FEDERAL AIRWAYS
ESTABLISHMENT ENGINEERING DIVISION

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

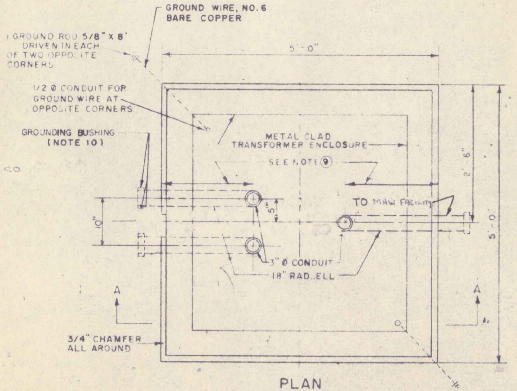
7-12-72
D-4898

NOTES

1. THE FIVE BOTTOM POLE STEPS ON EACH POLE SHALL BE THE DETACHABLE TYPE (ITEM NO. 2) ALL OTHERS SHALL BE THE FIXED TYPE (ITEM NO. 3).
2. AFTER TENSION ADJUSTMENT, ALL TURNBUCKLES SHALL BE SAFETIED WITH 3 TURNS OF #9 WIRE WHICH SHALL BE GALVANIZED & SIMILAR TO METAL USE IN GUY WIRES & TURNBUCKLES TO PREVENT ELECTROLYSIS.
3. SIMILAR & EQUAL PARTS MANUFACTURED BY OTHERS MAY BE SUBSTITUTED FOR THOSE CALLED FOR IN THE MATERIAL LIST.
4. ELECTRONICS SECTION WILL INSTALL SPARK GAP & CONNECT TO GROUND SYSTEM & ANTENNA WIRE.

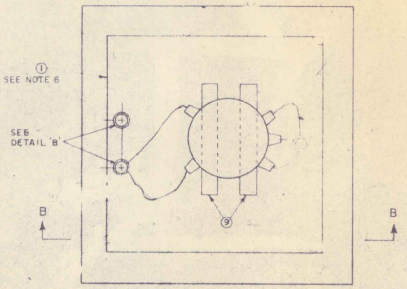

100 AMP MAIN BKR.
S/N
(10)
CABLE BY FAA CONTRACTOR
METER SOCKET (11)
(7)
CABLE BY POWER CO
(1)
SPARE 3" COND
BY POWER CO CABLE

WIRING DIAGRAM

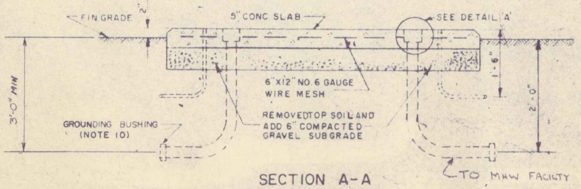

GROUND WIRE, NO. 6 BARE COPPER
1 GROUND ROD 5/8" X 8' DRIVEN IN EACH OF TWO OPPOSITE CORNERS
1/2 Ø CONDUIT FOR GROUND WIRE AT OPPOSITE CORNERS
GROUNDING BUSHING (NOTE 10)
5'-0"
METAL CLAD TRANSFORMER ENCLOSURE
SEE NOTE ⑨
TO MAW FACILITY
10"
5"
2'-6"
5'-0"
3" Ø CONDUIT
18" RAD. ELL
A
A
3/4" CHAMFER ALL AROUND

PLAN

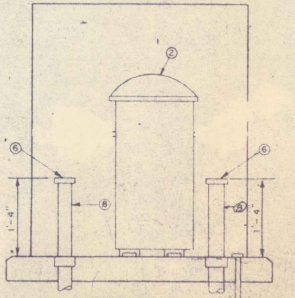
(NOT TO SCALE)


①
SEE NOTE 6
SEE DETAIL 'B'
⑨
B
B

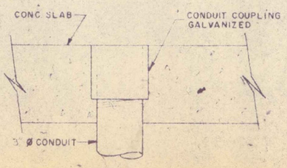
PLAN TRANSCLOSURE


FIN GRADE
2"
5" CONC SLAB
SEE DETAIL 'A'
3'-0" MIN
1'-6"
2'-0"
6"X12" NO. 6 GAUGE WIRE MESH
REMOVED TOP SOIL AND ADD 6" COMPACTED GRAVEL SUBGRADE
GROUNDING BUSHING (NOTE 10)
TO MAW FACILITY

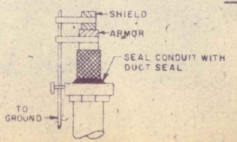
SECTION A-A


②
⑥
⑥
⑧
1'-4"
GROUND ROD

SECTION B-B


CONC SLAB
CONDUIT COUPLING GALVANIZED
3" Ø CONDUIT

DETAIL 'A'


SHIELD
ARMOR
SEAL CONDUIT WITH DUCT SEAL
TO GROUND

DETAIL 'B'

EQUIPMENT LIST

* ① TRANSCLOSURE 54" X 54" X 71" H
② TRANSFORMERS 2400-120/240 VOLTS } 10 KVA
FURNISHED AND INSTALLED BY POWER CO.
⑥ INSULATING BUSHING GROUNDING TYPE OZ BL3104 OR EQUAL
⑦ LOW VOLTAGE LIGHTING ARRESTOR 120/240V
⑧ 3" CONDUIT GALVANIZED STEEL
⑨ SUPPORT CHANNEL 3"X3"X4"
* ⑩ DISTRIBUTION PANEL 120/240, 50 AMP MAIN BREAKER
⑪ THE METER 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. CONTRACTOR TO SIZE CABLE FEEDER FROM METER SOCKET TO DISTRIBUTION PANEL TO BE COMPATABLE WITH POWER REQUIRMENTS.
5. ALL CONDUIT FITTINGS, NUTS, BOLTS AND STEELWORK SHALL BE GALVANIZED.
6. STENCIL THE FOLLOWING ON HINGED DOORS IN 1" 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. NE-D-21598, SHEETS 1 & 2, FOR LOCATION AND LAYOUT.

DRAWING NOT TO SCALE

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

XFMR. AND WIRING DIAGRAM

J. Cretella
C H Schultze
DATE 4/11/72
EA-442
DRAWING NO. EA-D-24852

BGR