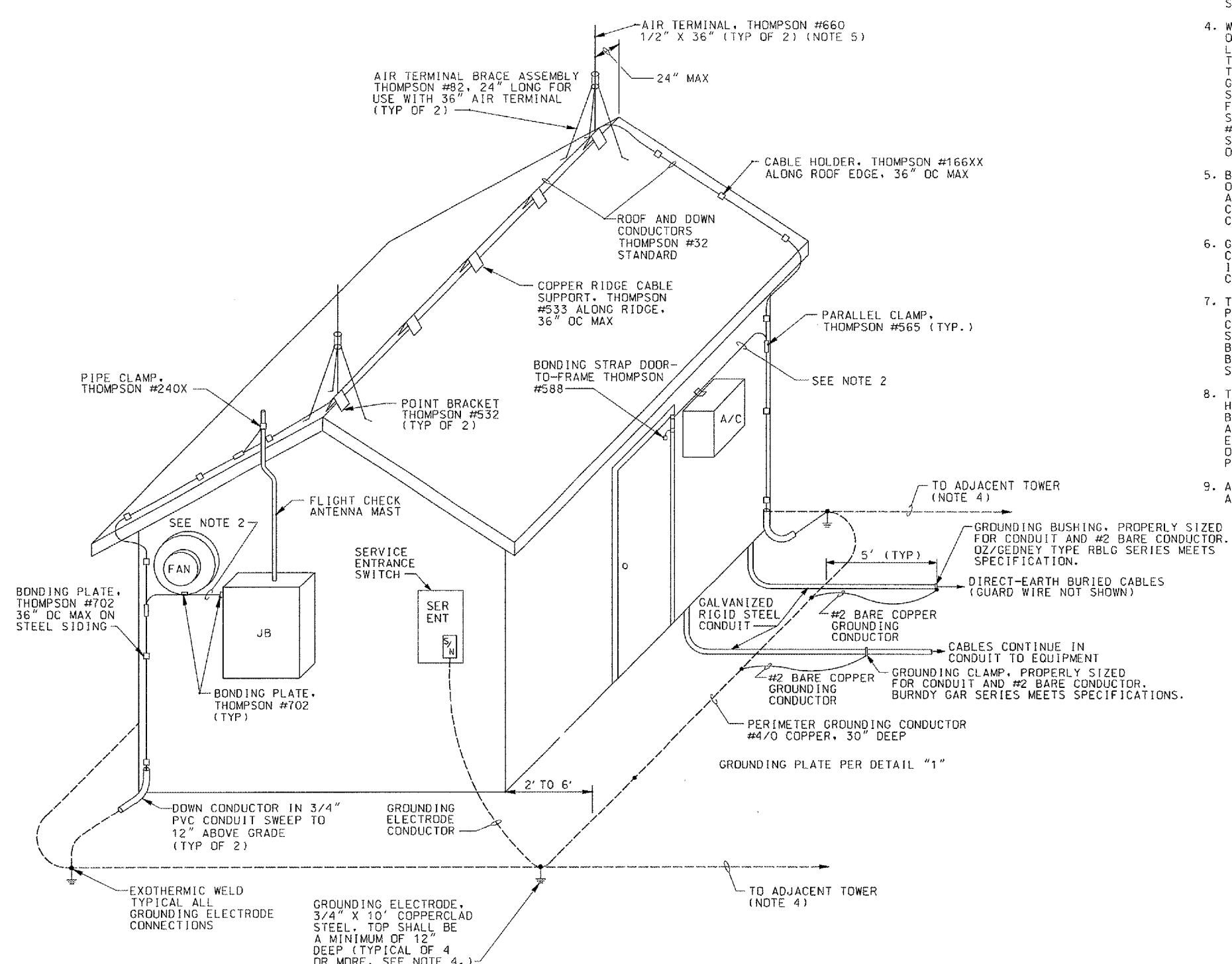


THIS DRAWING PRODUCED ON THE GREAT LAKES REGION MICROSTATION SYSTEM



NOTES:

1. ALL CLAMPS AND BONDING DEVICES SHALL BE BRONZE, ALL CABLES AND STRAPS SHALL BE COPPER, AND ALL BOLTS, SCREWS, AND FASTENING HARDWARE SHALL BE BRONZE OR BRASS UNLESS OTHERWISE SHOWN.
2. BOND A/C, VENT FAN, HOOD, FLIGHT CHECK ANTENNA MAST, DOOR FRAME, JUNCTION BOXES, AND ANY MISC EXTERIOR METAL OBJECTS TO DOWN CONDUCTORS WITH MIN #6 BARE - THOMPSON #14X OR #509X.
3. NO CONDUCTOR SHALL BE BENT TO LESS THAN AN 8" RADIUS NOR SHALL BE BENT TO LESS THAN A 90° ANGLE.
4. WHERE TOWERS OR MASTS SUCH AS GLIDE SLOPE, MIDDLE MARKER, OUTER MARKER, OR FAR FIELD MONITOR TOWERS OR MASTS ARE LOCATED WITHIN 30 FEET OF THE NEAREST PART OF THE BUILDING, THE PERIMETER #4/0 GROUNDING CONDUCTOR SHALL EXTEND AROUND THE ASSOCIATED TOWER OR MAST AND CONNECT TO TWO ADDITIONAL GROUNDING ELECTRODES PLACED ON EITHER SIDE OF THE ASSOCIATED STRUCTURE. ASSOCIATED TOWERS OR MASTS LOCATED FARTHER THAN 30 FEET FROM THE BUILDING SHALL HAVE THEIR OWN PERIMETER GROUNDING SYSTEM CONSISTING OF FOUR GROUNDING ELECTRODES AND SURROUNDING #4/0 COUNTERPOISE. THE SEPARATE PERIMETER GROUNDING SYSTEM SHALL BE CONNECTED TO THE BUILDING SYSTEM BY A BARE CONDUCTOR OF MINIMUM #4/0 SIZE.
5. BUILDINGS WITH FLAT ROOFS REQUIRE A THOMPSON #660LA AIR TERMINAL ON #688F-4 ADHESIVE BASE AND #82 TRIPOD BRACE WITH ADHESIVE FEET AT EACH CORNER AND A PERIMETER ROOF CONDUCTOR (THOMPSON #32) CONNECTING ALL TERMINALS IN PLACE OF RIDGE TERMINALS AND CONDUCTOR AS SHOWN.
6. GROUNDING BUSHINGS SHALL BE INSTALLED AT EACH END OF METALLIC CONDUITS. A #6 BARE COPPER GROUNDING CONDUCTOR SHALL BE ROUTED INSIDE CONDUIT AND SHALL BE BONDED TO EACH GROUNDING BUSHING. CONNECT CONDUCTOR TO A GROUNDING ROD USING AN EXOTHERMIC WELD.
7. THE STAND-OFF INSULATORS SHALL BE SECURED TO THE WALL USING A PAINTED PLYWOOD PANEL SHIMMED OUT FROM THE WALL, GALVANIZED CHANNEL OR METAL MOUNTING BRACKET SCREWED TO THE WALL, OR AS SHOWN ON THE EQUIPMENT SHELTER DRAWING. THE FASTENERS SHALL BE OF SUFFICIENT LENGTH TO PASS THROUGH THE MOUNTING CHANNEL, BRACKET, OR OTHER MOUNTING BODY (INCLUDING WASHERS OR OTHER SHIMS), AND BE SNUG WHEN FULLY ENGAGED IN THE STAND-OFF INSULATOR.
8. TWO-BOLT CONNECTORS WITH SILICON BRONZE 3/8"-16UNC X 1 1/2" HEX HEAD BOLT, NUT, AND LOCK WASHER ARE REQUIRED FOR ALL CONDUCTORS TO BE CONNECTED TO THE GROUNDING PLATES. ONE-BOLT CONNECTORS ARE NOT ACCEPTABLE. NOTE THAT ONLY ONE OF THE HOLES REQUIRED FOR INSTALLING EACH 2-BOLT CONNECTOR IS SPECIFIED IN DETAIL "1". THE INSTALLER OF THE CONNECTOR SHALL DRILL THE SECOND HOLE TO MATCH THE BOLT PATTERN OF THE SELECTED CONNECTOR.
9. ALL EXTERIOR GROUNDING MATERIALS FOR THE SHELTERS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

CONTRACTOR SHALL SUBMIT REQUESTS FOR SUBSTITUTION OF SPECIFIC MANUFACTURER'S ITEMS SHOWN PER PARAGRAPH 10 OF THE SPECIAL SPECIFICATIONS.

SHEET 41 OF 67

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		CHICAGO, ILLINOIS
GREAT LAKES REGION		
LIGHTNING PROTECTION FOR SMALL ILS/ALS BUILDINGS		
AURORA		AURORA MUNICIPAL AIRPORT IL
REVIEWED BY	SUBMITTED BY	APPROVED BY
DESIGNED	ISSUED BY	DATE
PROJ ENGR, TIMOTHY DYER	CHICAGO NAS IMPLEMENTATION CENTER	02/21/2006
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