

## **W253DB - TPO Calculation & CP Special Conditions**

### **TPO Calculation:**

ERP: 22 Watts

Ant. Gain = 5.5 dbd = 3.548 X

Ant. input = 6.2 Watts

Overall line loss, 435ft 7/8" Heliax Foam @ 98.5 MHz = 1.57 dB => 69.7% Efficiency

Isocoupler loss = 1.23 dB => 75.3% Efficiency

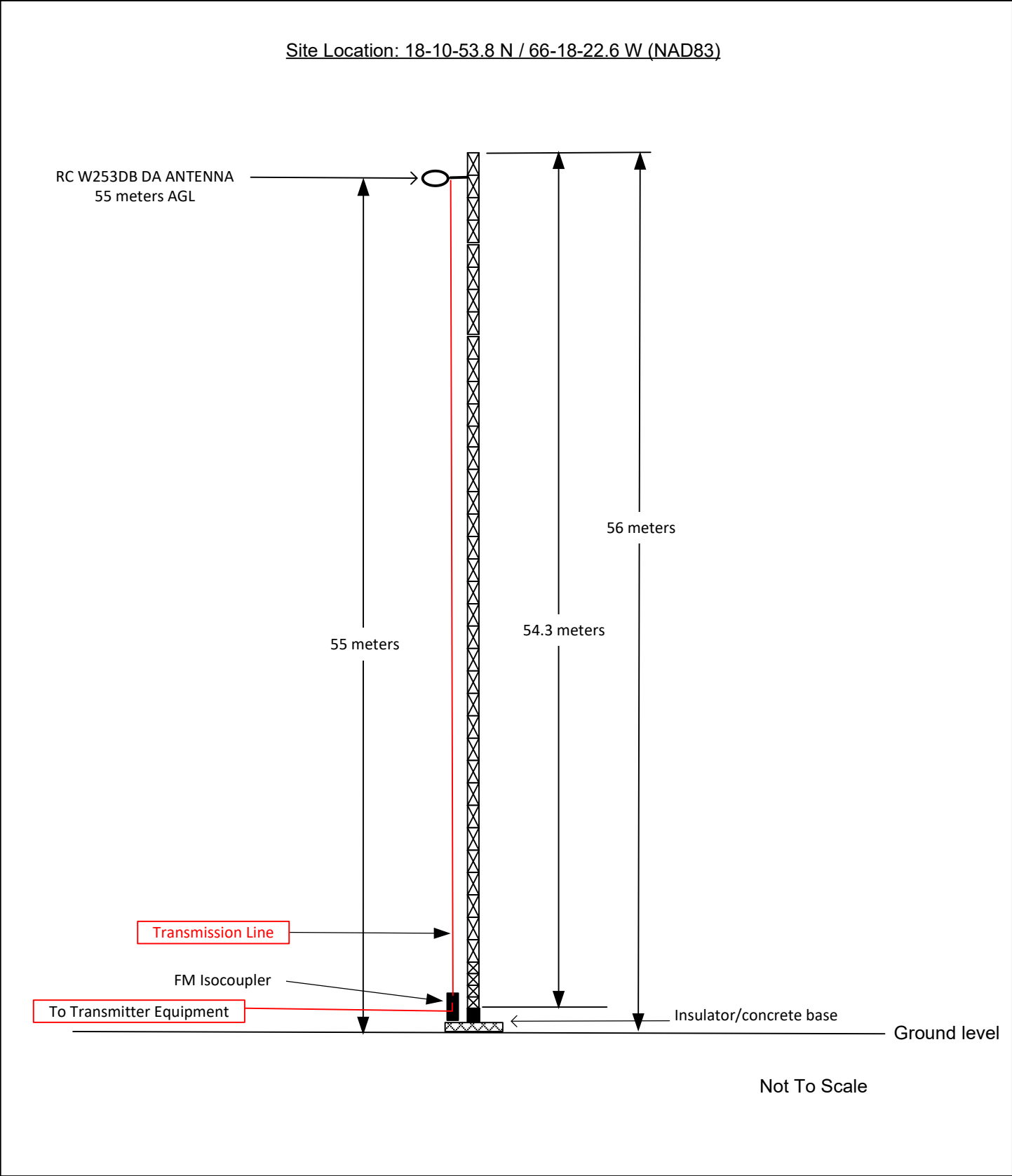
TPO = 11.8 Watts = 0.012 Kw

### **W253DB CP Special Conditions Compliance:**

As specified in the CP Special Conditions, upon completion of the antenna installation, the antenna impedance of AM Station WOLA was measured, and it was determined that the resistance of the AM antenna changed very little from its license value of 53 ohms, considerably less than 2 percent.

Figure 1 shows the W253DB antenna installation on the WOLA tower.

Figure 1



SKETCH OF W253DB ANTENNA INSTALLATION