

W238DH TPO Calculation & CP Special Conditions Compliance

TPO Calculation:

ERP = 250 Watts

Antenna Gain = 8.9 X

Antenna Input Power = 28 Watts

Line Loss, 375 ft, 7/8" foam Heliax @ 95.5 MHz, Effic: 73.6 %

Power Input to transmission Line: = 38 Watts

Isocoupler Loss: 0.2 dB, Effic.: 95.5% = 0.955 X

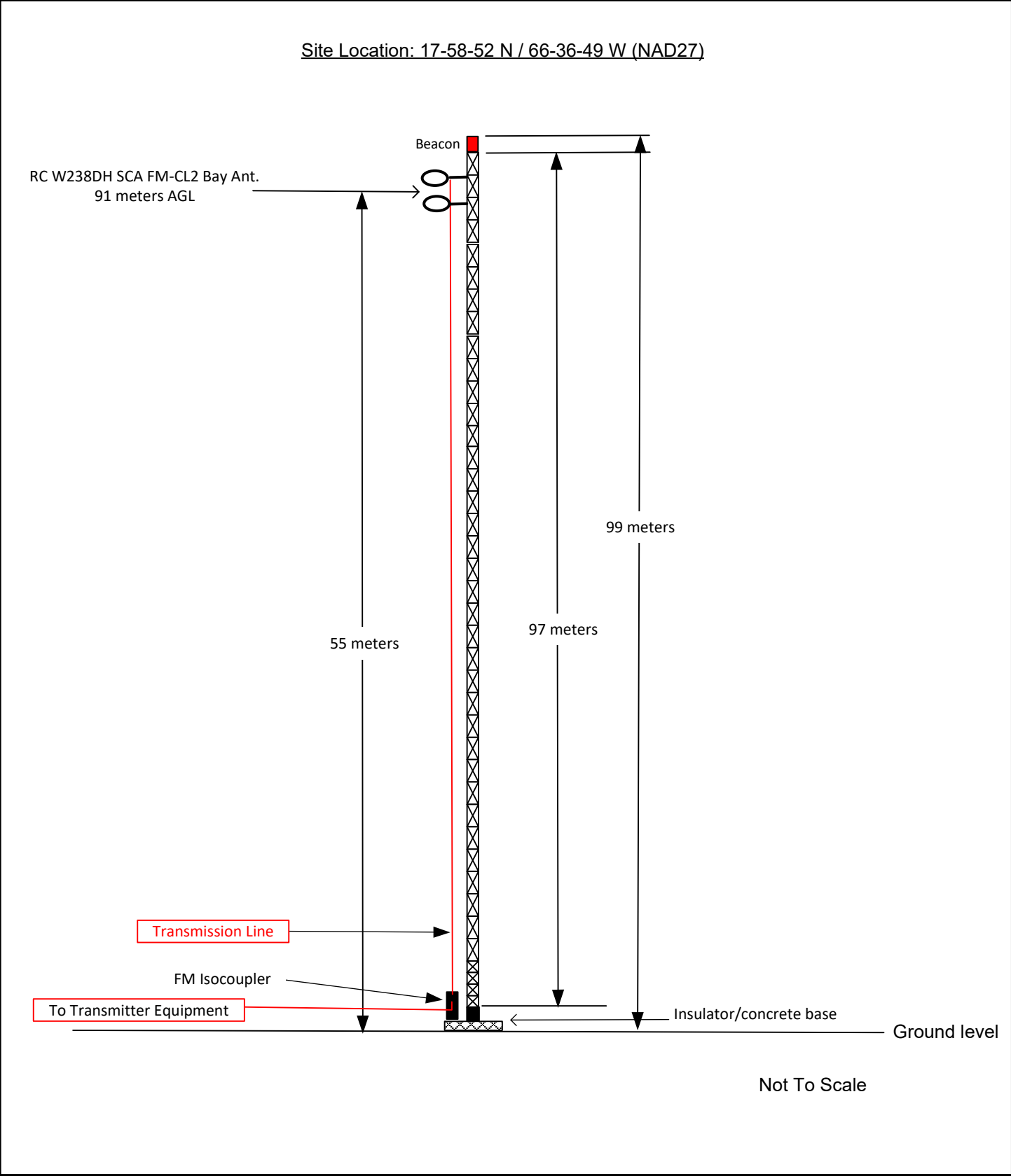
TPO = 40 Watts

W238DH CP Special Conditions Compliance:

The permittee confirms that as a condition of the W238DH CP it is submitting an amended application for license, FCC 302-AM to cover the resistance change above 2% and change in operating antenna current of station WLEO (AM), Ponce, PR, Facility ID No. 52943, to return to direct power measurement. Included in this exhibit is a tower sketch, Figure 1, of the installation of the W238DH antenna system.

The W283DH(FX) CP "Special Conditions" specify analysis of the potential adverse effects to the operation of AM station WDEP, Fac. ID 74456, at the time of the W283DH(FX) CP grant operating from the WLEO tower. WDEP has since moved to a nondirectional tower, 2.43 kilometers away and on September 18, 2019, it was licensed at the new site, FCC File No. BL 20190826ABO. The latest FCC AM Proximity Rules, effective as of February 20, 2014, specify that if a new structure is within one wavelength of a nondirectional tower, and taller than 1/6 of a wavelength, then it requires study. In the case of WDEP, the WLEO/W283DH tower, which has not been structurally altered, is located 2.43 kilometers away, much more distant than one wavelength, 201.34 mts at WDEP's frequency of 1490 kHz; thus, no proximity study is required.

Figure 1



SKETCH OF WLEO & W238DH ANTENNA INSTALLATION