

SIGNAL™: WCHE_237_1stADJACENT.map

Sites

Site: BETHLEHEM

N40°37'13.00" W75°17'37.00" 218.9 m
WZZO Tx.Ht.AGL: 102.1 m Total ERPd: 14.77dB

Grp: 1 directional-horizontal/0.0° 95.1000 MHz

Site: W237EW LIC

N39°57'58.70" W75°37'50.00" 75.0 m
W237EW Tx.Ht.AGL: 46.0 m Total ERPd: -6.00dB

Grp: 1 directional-horizontal/46.0° 95.3000 MHz

Interference contour study

Propagation methods:

service contour : FCC-FCC 50.0%
1st adjacent interference : FCC-EDX 10.0%

54.0 dBuV/m service contour
48.0 dBuV/m 1st adjacent interference

Notes

Corrected plot of W237EW with Shively SLV-3 CP modified pattern

prepared by

Larry H. Will, P.E.

Glen Mills, PA 19342

KILOMETERS

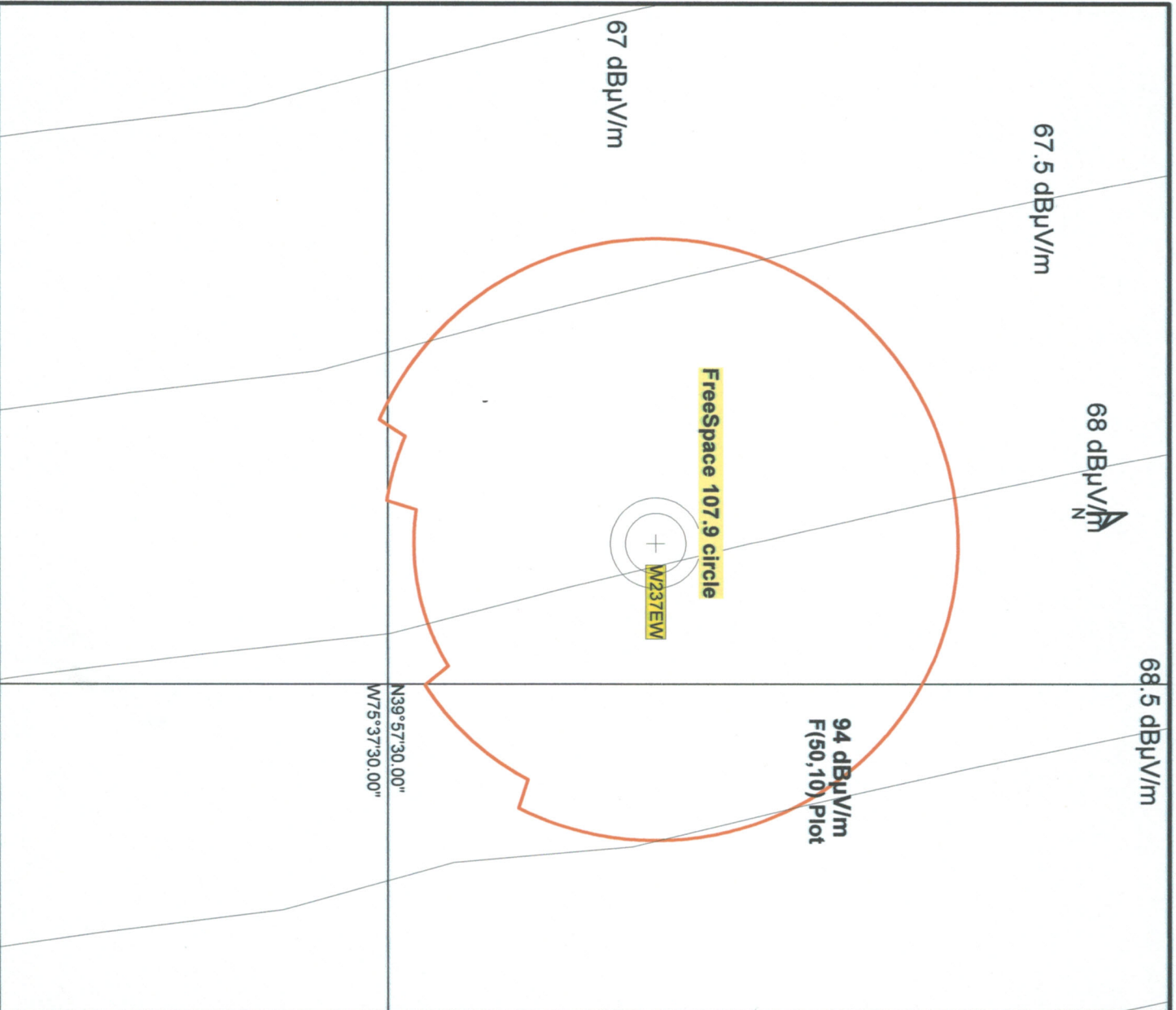


INTERFERENCE STUDY

W237EW

Figure EE-2

5/4/2021



SIGNAL™: WCHE_237_2ndADJACENT.map

quick contours

Sites

Site: W237EW LIC
N39°57'58.70" W75°37'50.00" 75.0 m
W237EW Tx.Ht.AGL: 46.0 m Total ERPd: -6.02dBV
Grp: 1 directional-horizontal/0.0° 95.3000 MHz

Interference contour study

Propagation methods:

2nd adjacent interference : FCC-EDX 10.0%

= 94.0 dBuV/m 2nd adjacent interference

C:\Program Files\EDX\EDX AM

Notes

Corrected plot of W237EW with Shively SLV-3-SS
Omnioid pattern antenna.
The Free space calculations used.
Note the more realistic value of the W237EW
calculated interference signal.

prepared by
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INTERFERENCE STUDY

W237EW 2ND ADJACENT

Figure EE-3 05/04/2021

SIGNAL™: WCHE_DAY AM.map

Sites

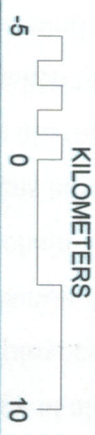
Site: WCHE-AM Day
N39°57'58.70" W75°37'50.00" 75.0 m
WCHE_am Tx:Ht.AGL: 46.0 m Total ERPd: -6.00dBkW
Grp: 1 directional-horizontal/0.0° 95.3000 MHz

quick contours

C:\Program Files\EDX\EDX AMW 4

Notes

Sites
Cal Sign: WCHE Power 1.00 kW
Pattern: DA-D Frequency 1520 KHz
Coordinates 39-57-58N: 75-57-57W
W237EW 95.3MHz 0.25 kW
prepared by
Larry H. Will, P.E.
Glen Mills, PA 19342

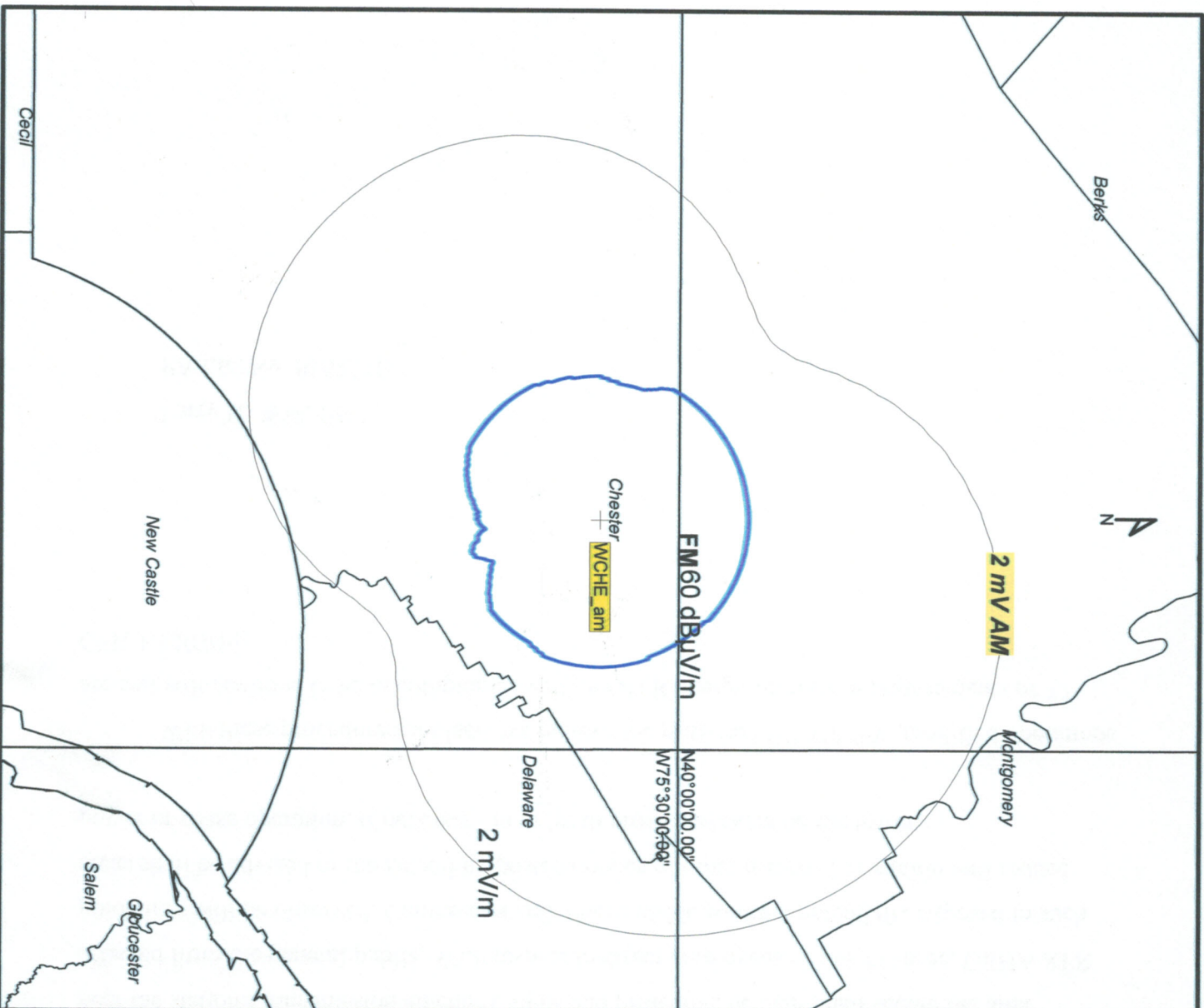


WCHE CONTOURS

WCHE-AM DAY & W237EW

Figure EE-4

5/3/2021



RFR Exhibit - RF Power Density at 2 m above ground level

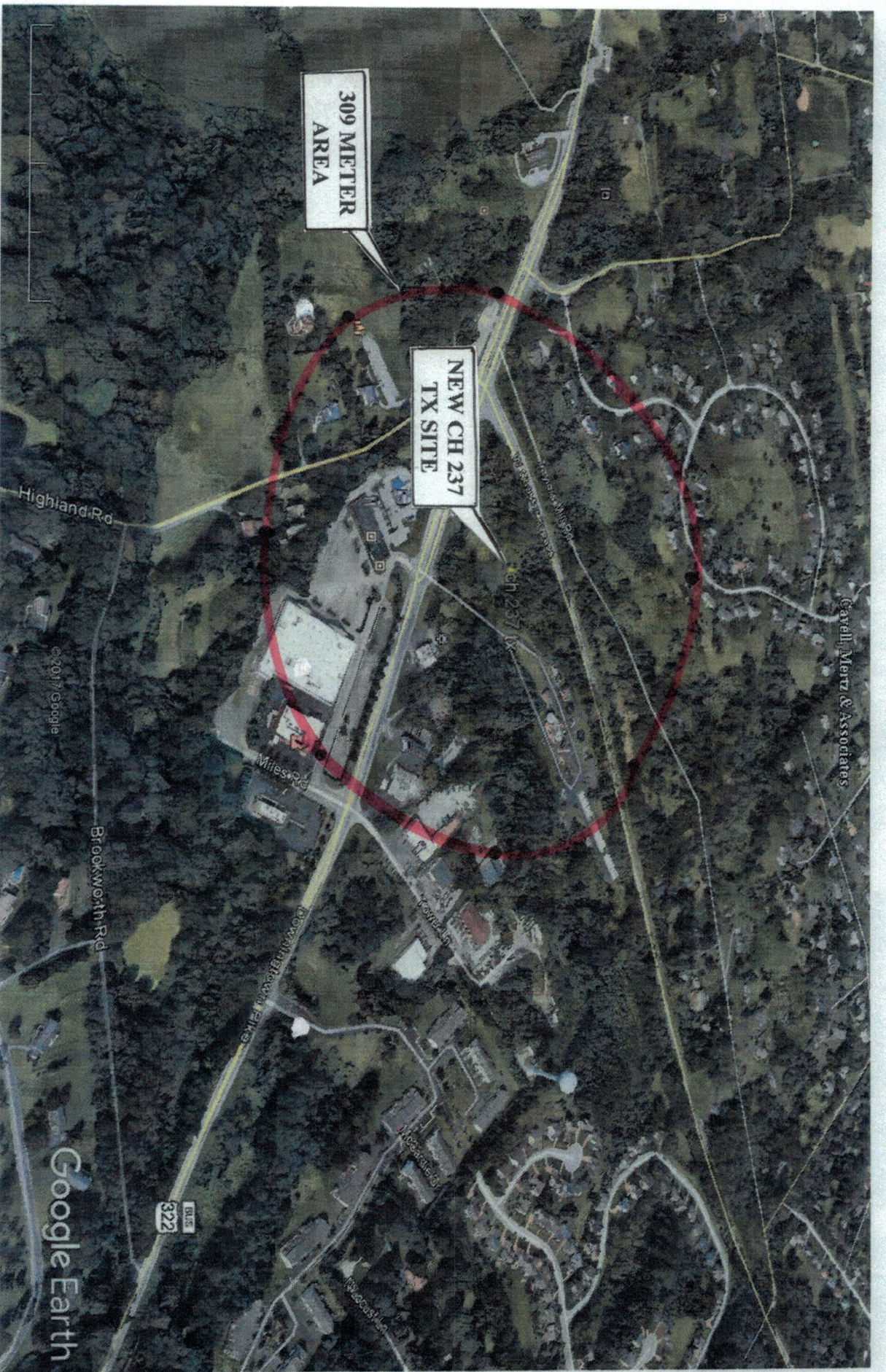
7.8m

4.442678127464 $\mu\text{W}/\text{cm}^2$

View Tabular Results +

Channel Selection	Channel 237 (95.3 MHz)		
Antenna Type+	EPA Type 1: Ring-and-Stub or "Other"		
Height (m)	46	Distance (m)	100
P-H (W)	250	ERP-V (W)	250
nm of Elements	3	Element Spacing (K)	0.941
nm of Points	500	Apply	

Figure EE-5 attached shows that at no point at 2 meters above ground does the RF level exceed 4.45 uW/cm², well below safety requirements for the general public/uncontrolled requirements. Also the RF exposure from WCHE(AM) is less than 2 meters for either tower and contained within the locked and marked fencing around each tower.



Google Earth

feet
meters

1000

600



FIGURE EE-6

OVERHEAD VIEW OF NEW CH 237 TRANSMITTER SITE SHOWING TX
LOCATION AND 309 METER RADIUS OF REQUIRED 2ND ADJACENT
PROTECTION AREA

CERTIFICATION STATEMENT BY LARRY H. WILL, P.E.

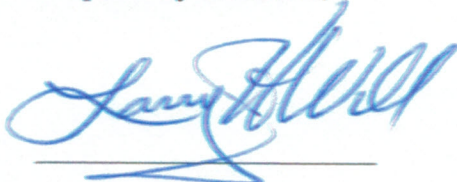
I, Larry H. Will, PE residing at 1055 Powderhorn Drive, Glen Mills, PA 19342 hereby certifies that the statements and findings prepared by him or under his direction and as shown in the instant Exhibit for Chester County Radio, Inc. (CCR) are correct and true to the best of my knowledge and belief, and as to such statements made of belief, they are believed to be true, except for information the Federal Communications Commission takes official notice. My qualifications are a matter of record with the Federal Communications Commission.

I am a Licensed Professional Engineer in Pennsylvania and New Jersey.

I have been involved in radio, television, and communications engineering for over 50 years, and have extensive civilian and military experience in radio communications systems including AM, FM, and TV broadcasting, shortwave transmission, troposcatter systems, terrestrial microwave and satellite systems, and fiber optic systems.

I am currently a Professional Broadcasting and Telecommunications Engineering Consultant and had retired in 1997 as Director of Engineering for New Jersey Network (NJN) after a 26+ year career. Previously he was an AM station part owner and served as Chief Engineer and Assistant Chief Engineer at several TV and Radio stations.

Respectfully submitted,



Larry H. Will, P.E.

May 3, 2021

CERTIFICATION STATEMENT BY LARRY H. WILL, P.E.

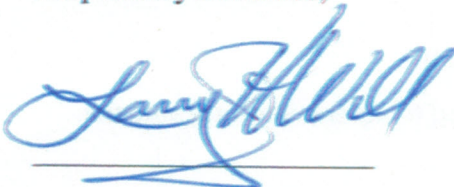
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