

CONSOLIDATED ENGINEERING EXHIBIT
Radio Catskill, Inc., Ch. 208A, Livingston Manor NY
November 2021

This application has been filed in the November 2021 Noncommercial Educational FM Reserved Band window for a new Class A station to serve Livingston Manor, NY on Channel 208A (89.5 MHz). All contour plots are based on the FCC 30-arc-second terrain database unless noted otherwise. Population estimates are based on 2010 US Census Block data.

Figure 1 shows that the 60 dBu contour of the proposed facility will completely encompass the proposed community of license, Livingston Manor, NY. Total area within this contour is 178.7 square km with a population of 3,818 persons.

Figures 2 and 3 demonstrate protection to co-channel station WUUA, Glen Spey NY (FID 173565) and first-adjacent stations WFGB, Kingston NY (FID 60896), WRHO, Oneonta NY (FID 26330) and WSKG-FM, Binghamton NY (FID 74039).

Figure 4 demonstrates protection to third-adjacent station WCIJ, Unadilla NY (FID 174290). There are no nearby second-adjacent facilities requiring consideration.

Figure 5 demonstrates protection under 73.525 to three relevant Channel 6 TV facilities, showing that at no point does the proposed new facility place a 67.4 dBu signal within any channel 6 station's 47 dBu contour.

Figure 6 illustrates the two other NCE-FM stations that provide 60 dBu coverage to any portion of the proposed new facility's 60 dBu coverage area. **Figure 7** demonstrates the area in which the proposed new facility will provide a second NCE-FM service, with an area of 178.7 square km (83.38% of the total 60 dBu coverage) and population of 2,603 (65.56% of the total 60 dBu coverage).

The reference coordinates for the center of Livingston Manor NY, the proposed community of license, are 41.9003 N, -74.8282 W. Using the FCC's calculator at fcc.gov/media/radio/distance-and-azimuths, the distance to Radio Catskill Inc. headquarters at 41.7782 N, -74.9275 W (2758 State Route 52, Jeffersonville NY) is 9.863 miles, qualifying Radio Catskill, Inc. as a local applicant.

Based on FCC "FM Model" calculations assuming an EPA Type 1 two-bay antenna, the maximum radiofrequency power density attributable to the proposed station will not exceed 0.19 percent of the General Population / Uncontrolled exposure guideline; therefore, the proposed facility should not have a significant environmental impact. In coordination with other users, applicant will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

Figure 1
Proposed Coverage Contour

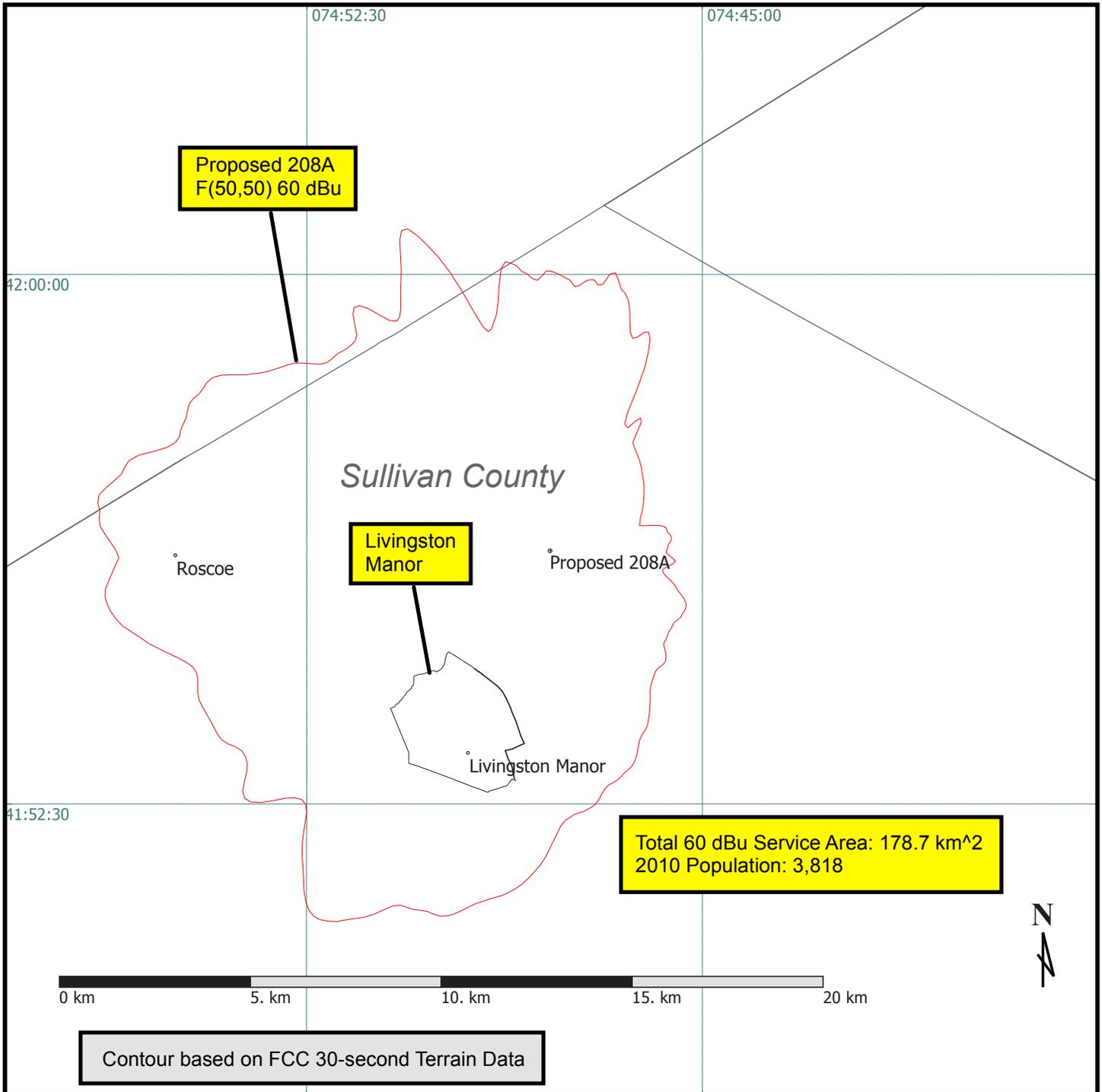


Figure 2

Co-Channel and 1st-Adjacent Contour Protection

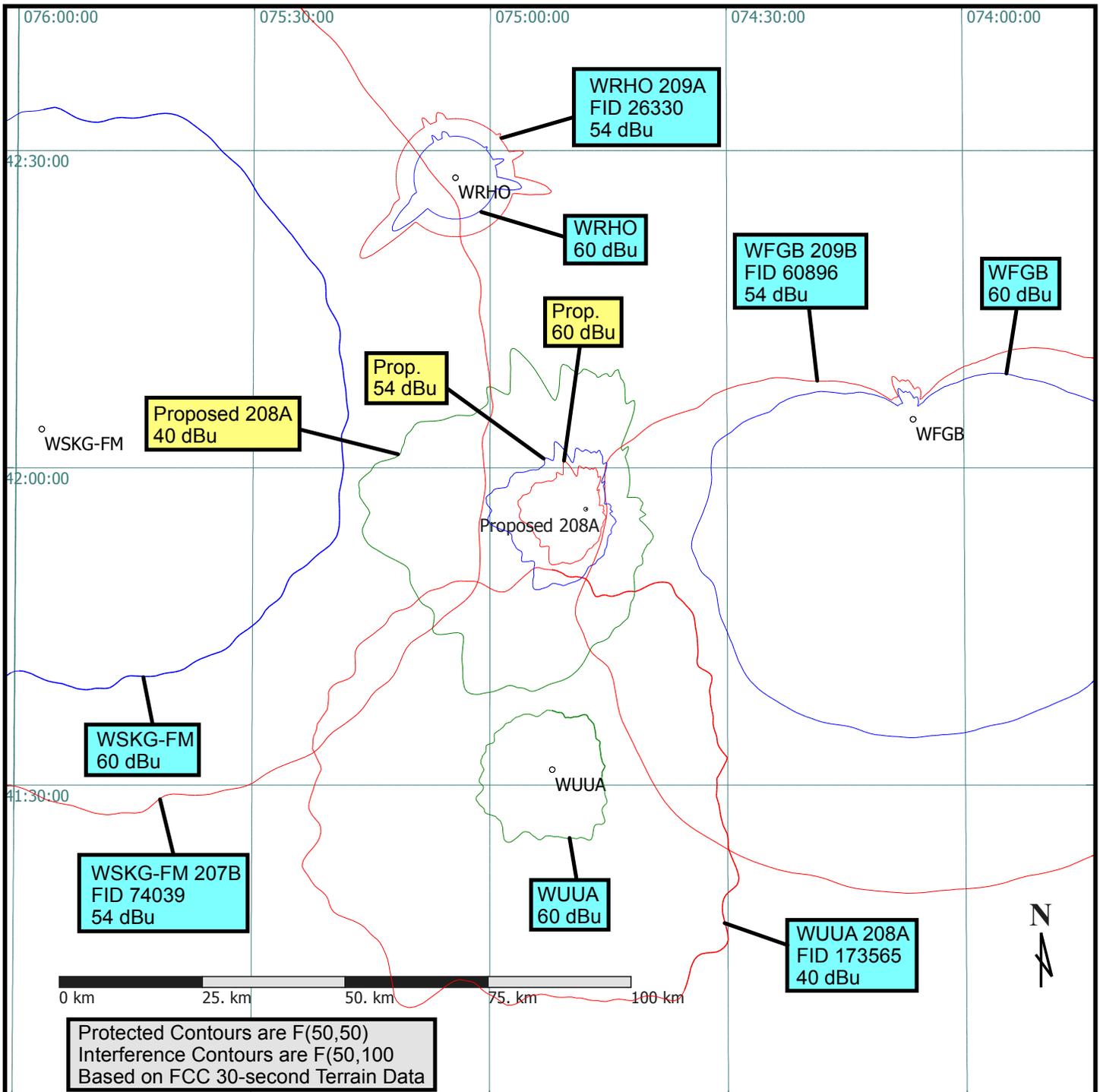


Figure 3

Detail of Clearance from WFGB

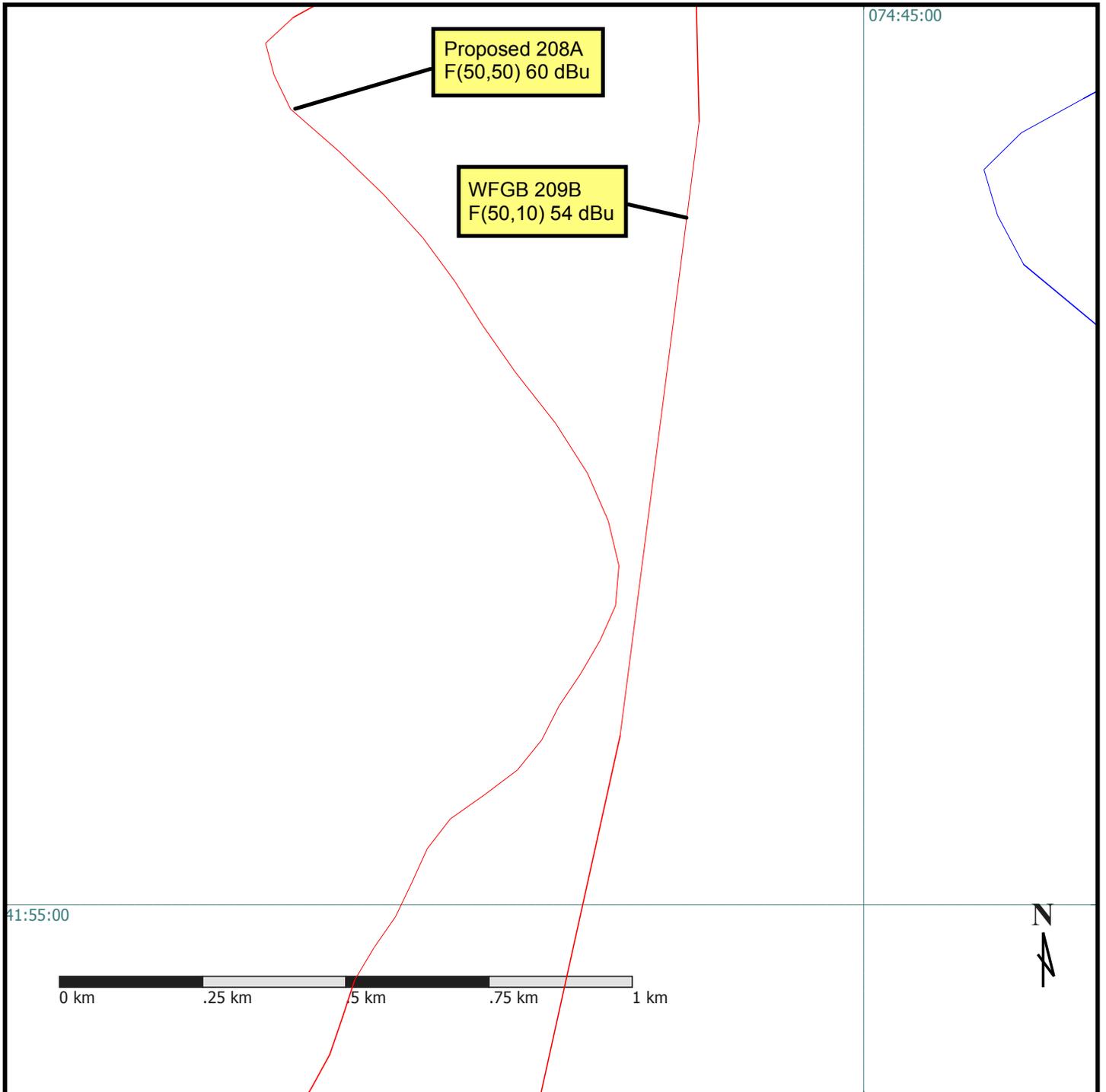


Figure 4
2nd- and 3rd-Adjacent Contour Protection

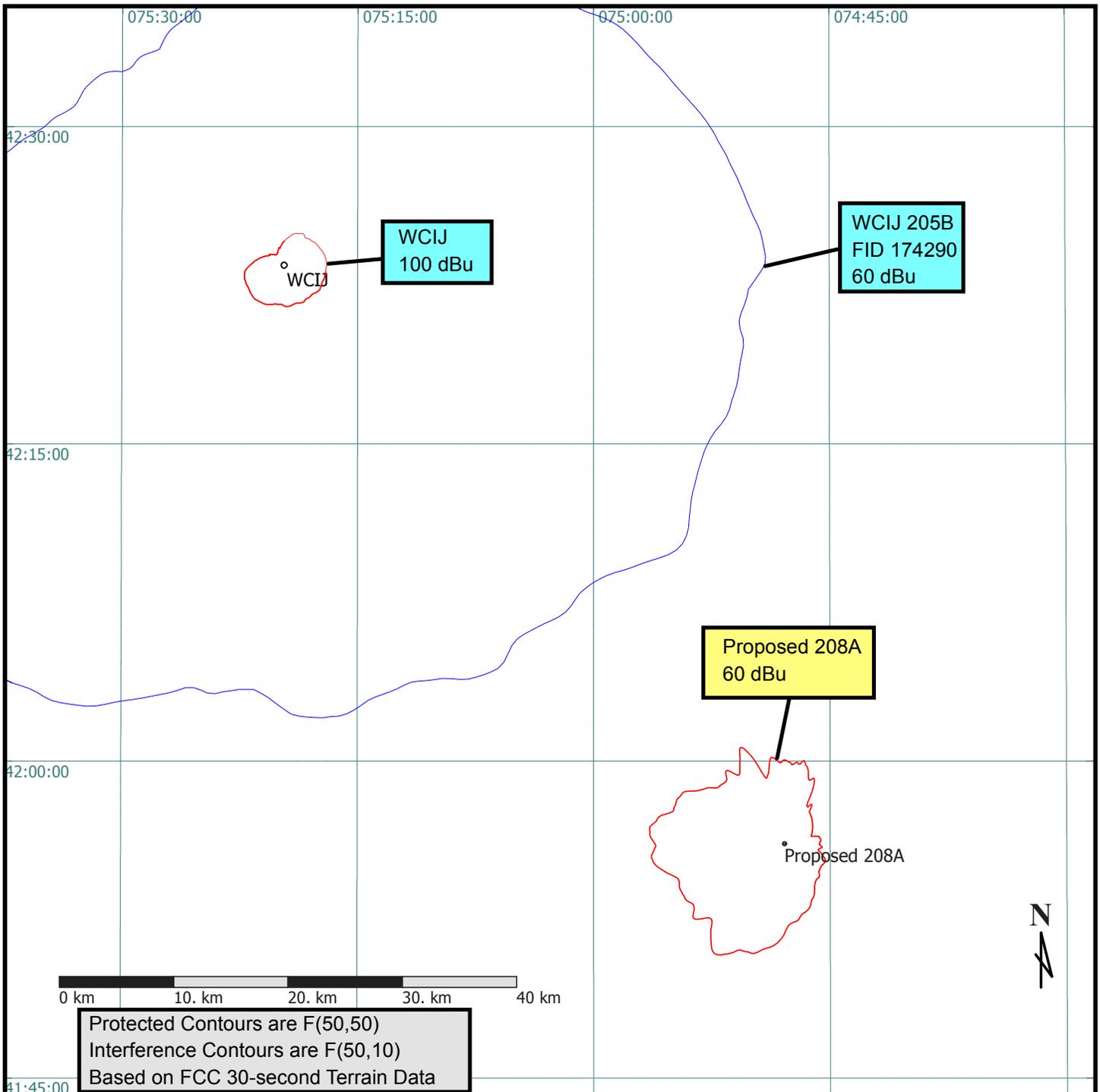


Figure 5

47 CFR §73.525 TV Channel 6 Protection

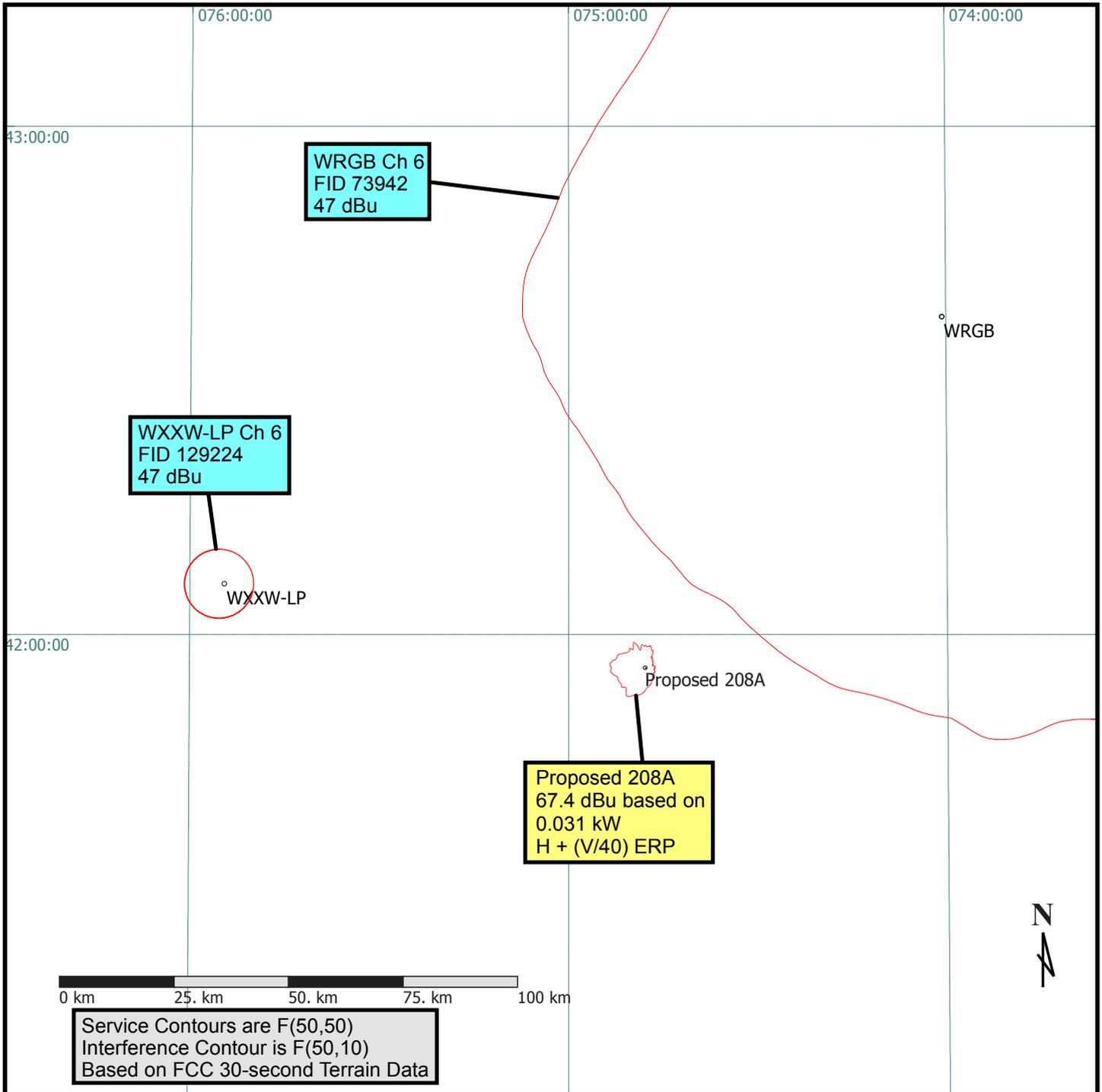


Figure 6
Present NCE Aural Services Overlapping Proposed Service

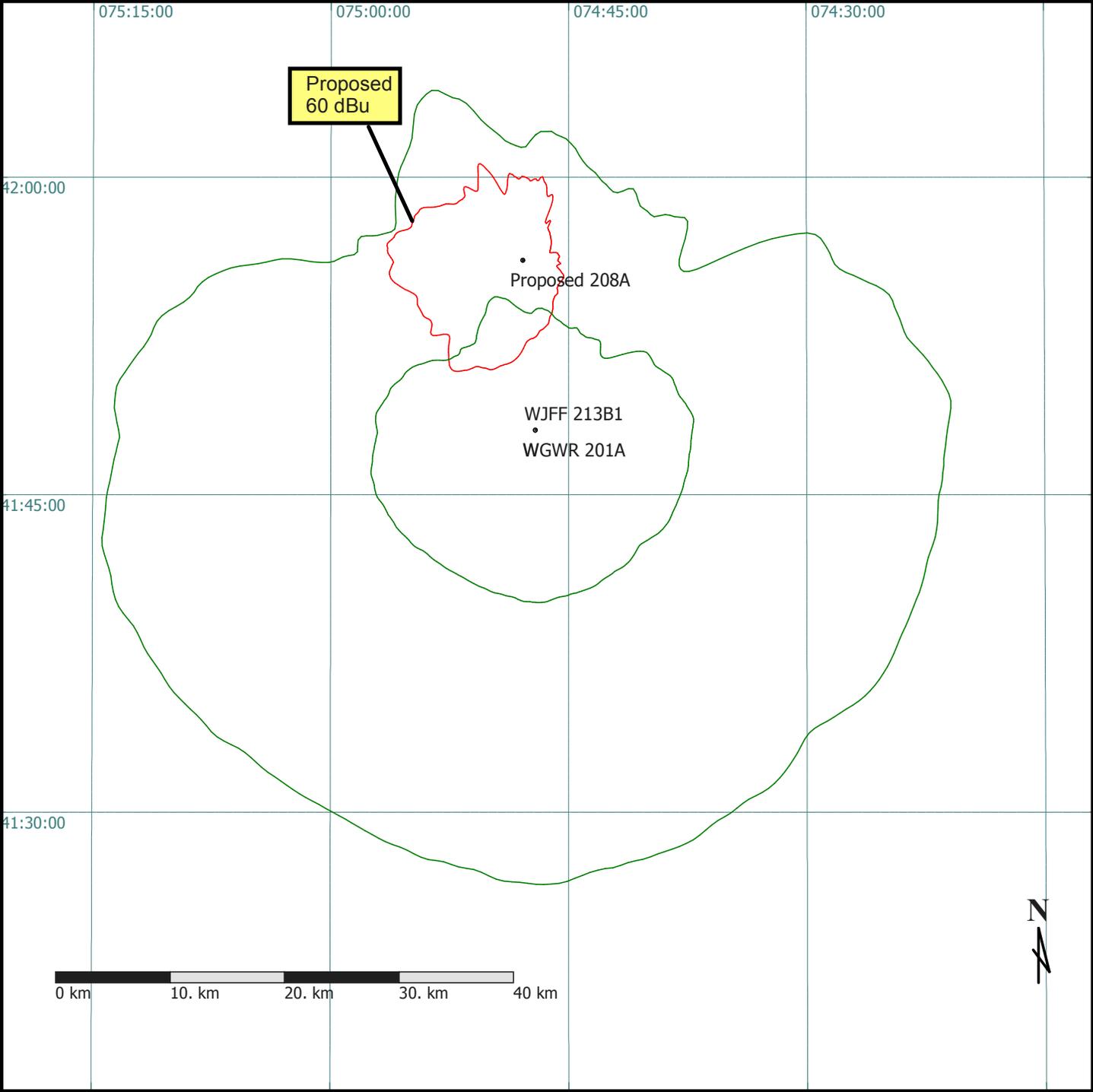


Figure 7

Section 307(b) NCE Aural Service Analysis

PROPOSED Total 60 dBu Service Area: 178.7 km² 2010 Population 3,818 persons
2nd NCE-FM Service Area: 149 km² (83.38%) Population: 2,503 (65.56%)

