

KNRG (FM)
Channel 222C3 – 92.3 MHz
12 kW ERP – 145 m HAAT
New Ulm, Texas
October 2014

§73.315 Compliance from Proposed Site Utilizing §73.313(e)

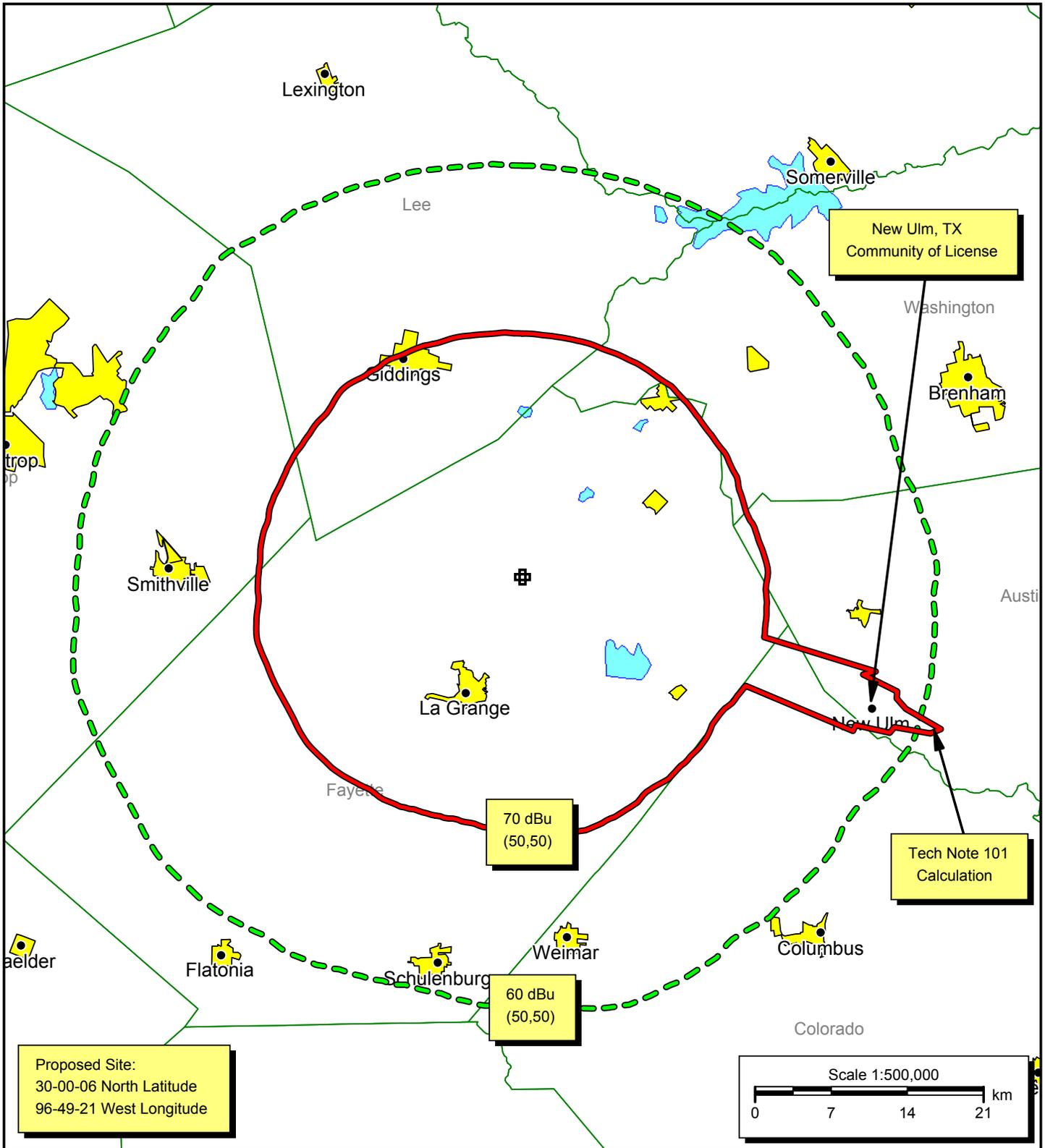
From the proposed KNRG (FM) site of North Latitude 30° 00' 06" and West Longitude 96° 49' 21" the 70 dBu contour does not cover 100 percent of New Ulm, TX, the community of license. However, in this particular case, we find that a supplemental method of depicting city grade coverage as noted in §73.313(e) of the Commission's Rules would be appropriate. The community of New Ulm is completely inside the traditional 60 dBu contour.

New Ulm, TX is within an arc between 105° and 115° from the proposed KNRG (FM) transmitter. Utilizing the Commission's F(50,50) curves, these radials fall short of covering 100 percent the city of license. We alternatively have determined the location of the 70 dBu contour using the Longley-Rice prediction method. This methodology, purchased from V-Soft Communications in a program called "Probe 3" was used to produce this Technical Note 101 study. In this particular situation, coverage calculations for the 70 dBu contour have been made in a point-to-point mode (mean occurrence drop-off). The following table is a comparison of the standard FCC method of calculating the 70 dBu and the Longley-Rice method. In all cases, the Longley-Rice method exceeds the FCC method greater than 10%.

<u>Radial (Bearing)</u>	<u>Location of 70 dBu (FCC Method) in km</u>	<u>Location of 70 dBu (Longley-Rice Method) in km</u>	<u>Percent Change</u>	<u>Gain (km)</u>
105°	22.89	33.60	46.79	10.71
106°	22.93	32.55	41.95	9.62
107°	22.93	36.00	57.00	13.07
108°	22.92	36.15	57.72	13.23
109°	22.94	37.25	62.38	14.31
110°	22.98	40.90	77.98	17.92
111°	23.01	40.15	74.49	17.14
112°	23.05	36.85	59.87	13.80
113°	23.06	36.65	58.93	13.59
114°	22.99	33.50	45.72	10.51
115°	22.90	33.50	46.29	10.60

Also in this exhibit is a graphic depiction of the KNRG (FM) normally calculated 60 and 70 dBu contours, the Technical Note 101 contour, the proposed KLTR (FM) transmitter site and New Ulm, TX, the community of license. This map was drawn using "Probe 3" from V-Soft Communications.

Based on this supplemental depiction, we find that the community of New Ulm, TX is served by the city grade contour of the proposed KNRG (FM) facility in compliance with §73.315 of the Commission's Rules.



City Grade Coverage from Proposed Site

KNRG (FM)

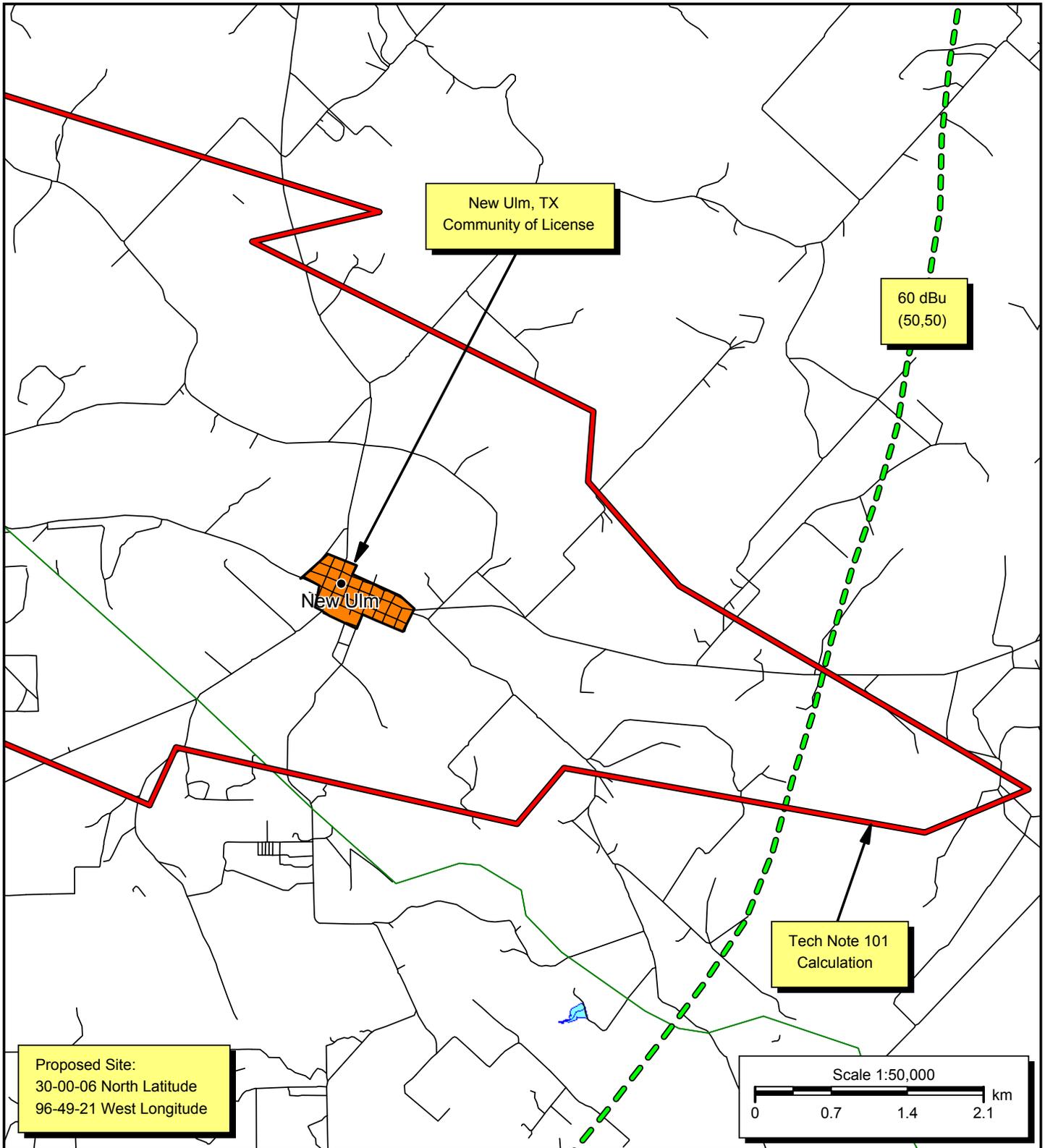
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New Ulm, Texas

Bromo Communications, Inc.

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Detailed City Grade Coverage from Proposed Site

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