

## **ENGINEERING STATEMENT – SECOND ADJACENT CHANNEL PROTECTION**

KVIL, Highland Park-Dallas, TX, 279C and KKDA-FM, Dallas, TX, 283C (both 22.1 kilometers at 154 degrees True from LPFM site) are second adjacent-channel stations to the proposed channel 281 LPFM facility. The 60 dBu F50,50 service contour of each extends well beyond the LPFM transmitter site. Using the well-established *Living Way Ministries* Methodology, no actual interference to any population is predicted to exist to KVIL or KKDA-FM.

Note that a rule waiver of Section 73.807 for this second adjacent-channel protection using the well-established *Living Way Ministries* Methodology is respectfully requested if such a rule waiver is deemed necessary for protection to any station.

The F50,50 signal strength from KVIL and from KKDA-FM at the proposed LPFM transmitter site is greater than 91 dBu (the “desired” signal). The second/third adjacent-channel protection is an undesired-to-desired (“U/D”) dB signal strength ratio of 40:1. Therefore, predicted interference to the worst-case of the above two protected facilities is a LPFM signal of greater than or equal to 131 dBu.

The 131 dBu signal based on a free space field determination is predicted to extend out to 20 meters from the proposed LPFM transmitter site. As shown by the attached aerial photograph of the proposed site, *there is no population located within the 131 dBu interfering contour distance of 20 meters.* Therefore, KVIL and KKDA-FM are both adequately protected by the proposed facility.



Google earth

