

DELAWDER COMMUNICATIONS, INC.

P.O. Box 1095
Ashburn, Virginia 20146-1095
(703) 299-9222

ENGINEERING REPORT

K282BK, El Dorado Hills, CA, Channel 283D FM Translator Application

ENGINEERING STATEMENT

Hispanic Family Christian Network, Inc. ("Applicant") proposes this minor change modification to K282BK to specify a site move and use of channel 283D (as opposed to 282D).

The attached map shows 60 dBu F50,50 contour overlap between the initial 2003 facility for channel 282D and the proposed facility.

All required protections are met by contour non-overlap pursuant to Section 74.1204, with the exception of protection to KKFS, Lincoln, CA 280A, and KNCI, Sacramento, CA 286B. KKFS and KNCI are protected, as discussed below.

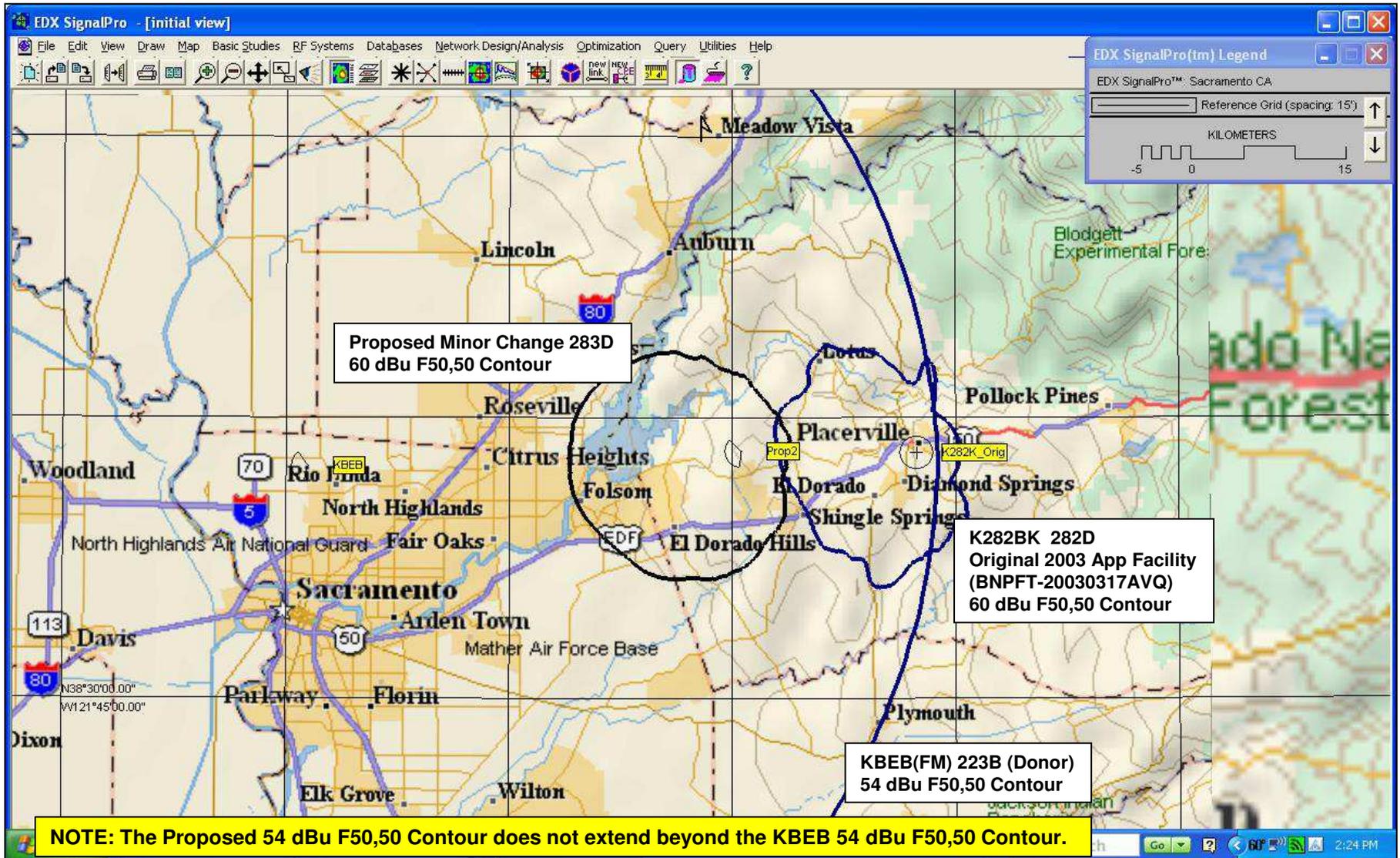
PROTECTION TO KKFS AND KNCI

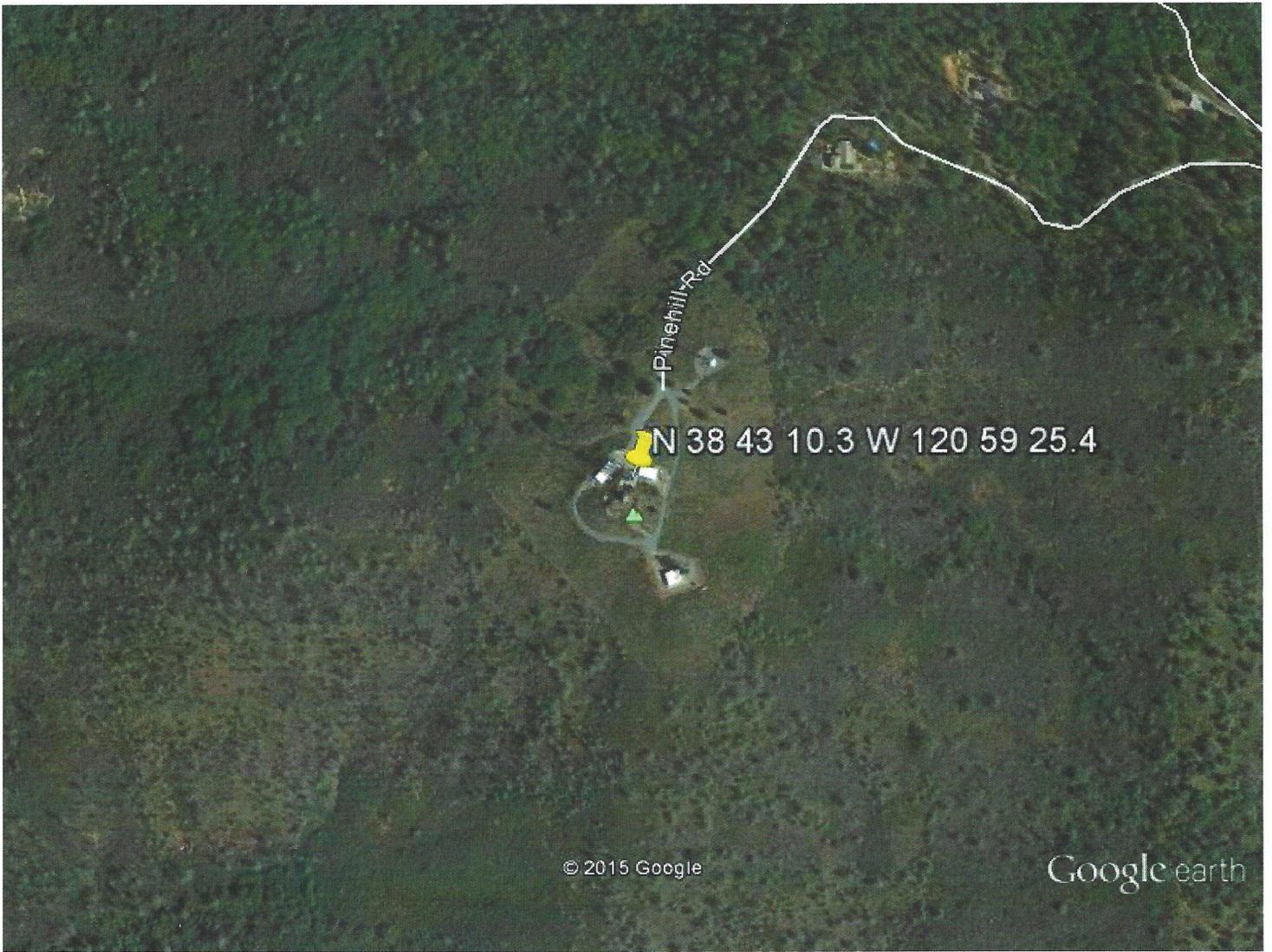
KKFS 280A (21.0 kilometers at 326 degrees True from the proposed FM translator site) and KNCI 286B (12.3 kilometers at 225 degrees True from the proposed FM translator site) are both third adjacent-channel to the proposed channel 283D facility. The 60 dBu F50,50 service contour of KKFS and the 54 dBu F50,50 service contour for KNCI extend beyond the proposed 283D transmitter site. Using the well-established *Living Way Ministries* Methodology, no actual interference to any population is predicted to exist to KKFS and KNCI.

Note that a rule waiver of Section 74.1204 for this second/third 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 KKFS at the proposed 283D transmitter site is greater than 66 dBu (the "desired" signal for KKFS). The F50,50 signal strength from KNCI at the proposed 283D transmitter site is greater than 66 dBu (the "desired" signal for KNCI). The second/third adjacent-channel protection of Section 74.1204 is an undesired-to-desired ("U/D") dB signal strength ratio of 40:1. Therefore, predicted interference to KKFS or KNCI from the proposed 283D facility is a signal of greater than or equal to 106 dBu.

The 106 dBu signal based on a free space field determination is predicted to extend out to 209 meters from the proposed transmit antenna. As demonstrated by the attached aerial photograph of the proposed site, there are no population or major roads located within 209 meters of the proposed tower site. Therefore, KKFS and KNCI are adequately protected by the proposed facility.





© 2015 Google

Google earth

Google earth

feet
meters

