

DELAUDER COMMUNICATIONS, INC.

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ENGINEERING REPORT

Sanger, TX, Channel 226D FM Translator Application

ENGINEERING STATEMENT

Primera Iglesia Evangelica Apostoles y Profetas Nazareth, Inc. ("Applicant") proposes this minor change modification to K225BR to specify use of channel 226D (as opposed to 225D) at its new transmitter site that will now serve Decatur, TX as a fill-in FM translator for KYDA. (An HD signal planned for KYDA will be re-transmitted.) K225BR is currently authorized on channel 225D at Sanger, TX.

The displacement from channel 225 to channel 226 is deemed a minor change pursuant to Section 74.1233(a) of the FCC Rules.

Figure EE-A, attached, is a map showing 60 dBu F50,50 contour overlap between the initial 2003 facility and herein proposed facility.

CHANNEL STUDY

Attached as Figure EE1 is a channel study for the proposed channel 226D facility. All required protections are met by contour non-overlap pursuant to Section 74.1204, with the exception of protection to KNOR 229C0, licensed to Krum, TX. KNOR is protected, as discussed below.

CONTOUR NON-OVERLAP PROTECTION SHOWING

Figure EE2, attached, shows non-overlap between the service contour of KMKT, Bells, TX, 226C3 and the interference contour of the proposed channel 226D facility. All contours were determined pursuant to Section 73.313 of the FCC Rules using a USGS 30 arc-second terrain database at one-degree radial intervals.

PROTECTION TO KNOR

KNOR, Krum, TX, 229C0 is third adjacent-channel to the proposed channel 226D facility. The 60 dBu F50,50 service contour of KNOR extends well beyond the

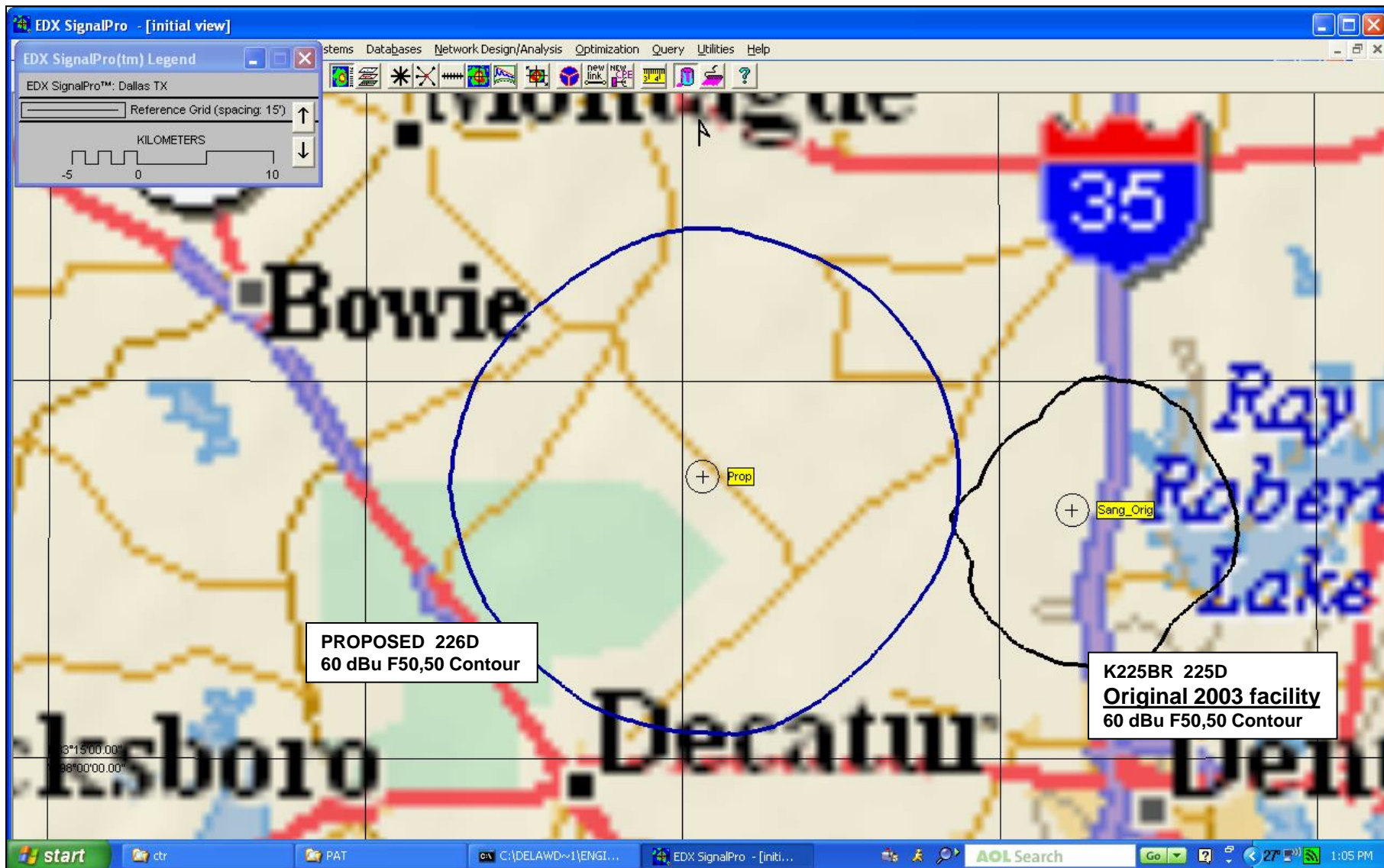
proposed 226D transmitter site. Using the well-established *Living Way Ministries* Methodology, no actual interference to any population is predicted to exist to KNOR.

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 this station.

The F50,50 signal strength from KNOR at the proposed 226D transmitter site is greater than 90 dBu (the “desired” signal). 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 KNOR from the proposed 226D facility is a signal of greater than or equal to 130 dBu.

The 130 dBu signal based on a free space field determination is predicted to extend out to 14 meters from the proposed LPFM transmit antenna. The interfering signal level will not reach any point at ground level or at 2 meters above ground level. (The clearance is more than 400 meters.) Therefore, KNOR is adequately protected by the proposed facility.

**FIGURE EE-A: K225BR TO DECATUR, TX, 226D FACILITY
CONTOUR OVERLAP SHOWING**



SECTION 74.1204 CHANNEL STUDY**PROJECT: DECATUR, TX, 226D FROM PROPOSED SITE****STUDY COORDINATES: N 33-26-13.0; W 97-29-05.0 (N D-M-S; W D-M-S)**

Call Docket	Channel FacilityID	Class Service	Frequency ERP	Status DA?	City HAAT	State RCAMSL	Country RCAGL	File Number
Latitude	Longitude			ASRN	Dist (km)	Dist (mi)	Azimuth	
Licensee/Permittee								
KZPS	223 C	FM	92.5 MHz	LIC	DALLAS	TX	US	BMLH-20060907AAO
-	6378		100. kW		508. m	698. m	453. m	
N 32 35	19.00	W	96 58	5.00	1045531	105.75 km	65.71 mi	152.81°
AMFM TEXAS LICENSES LLC								
Protected Contour Dist: 89.3 km Prop 226D Interf Contour Dist: <2.0 km								
Result: 14.4 km CLEAR (WORST-CASE STUDY)								
KNIN-FM	225 C1	FM	92.9 MHz	LIC	WICHITA FALLS	TX	US	BLH-20101122AEK
-	43754		100. kW		246.3 m	546.8 m	237.4 m	
N 33 54	4.00	W	98 32	21.00	1049789	110.52 km	68.67 mi	298.17°
TOWNSQUARE MEDIA WICHITA FALLS LICENSE, LLC								
Protected Contour Dist: 69.6 km Prop 226D Interf Contour Dist: 28.6 km								
Result: 12.3 km CLEAR (WORST-CASE STUDY)								
K225BR	225 D	FX	92.9 MHz	CP	SANGER	TX	US	BNPFT-20130819AAY
-	146564		0.25 kW		58. m	277. m	40. m	
N 33 24	52.00	W	97 11	32.00	1047192	27.32 km	16.97 mi	95.19°
IGLESIA EVANGELICA APOSTOLES Y PROFETAS NAZARETH, INC,								
NOTE: THIS IS THE FACILITY THAT IS BEING MODIFIED BY THIS MINOR CHANGE APPLICATION								
NEW	225 L1	FL	92.9 MHz	APP	SOUTHLAKE	TX	US	BNPL-20131112BEB
-	194281		0.0206 kW		64.8 m	253. m	76. m	
N 32 59	11.00	W	97 9	26.00	1056266	58.56 km	36.39 mi	148.60°
SOUTH LAKE HISPANIC COMMUNITY CHURCH								
Protected Contour Dist: 5.6 km Prop 226D Interf Contour Dist: 28.6 km								
Result: 24.4 km CLEAR (WORST-CASE STUDY)								
KMKT	226 C3	FM	93.1 MHz	LIC	BELLS	TX	US	BLH-19970815KB
-	77588		6.8 kW		191. m	379. m	178. m	
N 33 41	31.00	W	96 26	36.00	1019527	100.75 km	62.60 mi	73.34°
NM LICENSE, LLC								
Protected Contour Dist: 41.6 km Prop 226D Interf Contour Dist: 64.3 km								
Result: -5.2 km SHORT (WORST-CASE STUDY); SEE CONTOUR NON-OVERLAP STUDY THAT SHOWS PROTECTION								
KLIF-FM	227 C2	FM	93.3 MHz	LIC	HALTOM CITY	TX	US	BLH-20010522AAR
-	27299		50. kW	DA	120. m	274. m	146. m	
N 32 46	44.00	W	96 55	22.00	1209110	89.87 km	55.85 mi	144.27°
SUSQUEHANNA RADIO CORP.								
Protected Contour Dist: 51.1 km Prop 226D Interf Contour Dist: 28.6 km								
Result: 10.2 km CLEAR (WORST-CASE STUDY)								

SECTION 74.1204 CHANNEL STUDY**PROJECT: DECATUR, TX, 226D FROM PROPOSED SITE****STUDY COORDINATES: N 33-26-13.0; W 97-29-05.0 (N D-M-S; W D-M-S)**

Call	Channel	Class	Service	Frequency	Status	City	State	Country	File Number
Docket	FacilityID		ERP	DA?	HAAT	RCAMSL	RCAGL		
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Licensee/Permittee									

KLIF-FM	227	C2	FM	93.3 MHz	CP	HALTOM CITY	TX	US	BPH-20130425ABE
-	27299			16.5 kW	DA	264. m	414. m	284. m	
N 32 46	48.00	W	96 48	13.00	1064625	96.70 km	60.08 mi	138.84°	
SUSQUEHANNA RADIO CORP.									
Protected Contour Dist: 54.4 km Prop 226D Interf Contour Dist: 28.6 km									
Result: 13.7 km CLEAR (WORST-CASE STUDY)									

KNOR	229	C0	FM	93.7 MHz	LIC	KRUM	TX	US	BLH-20100719AFA
-	36289			43. kW		600.2 m	881.1 m	601.6 m	
N 33 29	5.00	W	97 24	44.00	1248974	8.57 km	5.33 mi	51.67°	
LIBERMAN BROADCASTING OF DALLAS LICENSE LLC									

NOTE: A SHOWING BASED ON THE LIVING WAY MINISTRIES METHODOLOGY TO THIS STATION IS INCLUDED WITH THIS APPLICATION THAT DEMONSTRATES PROTECTION TO THIS FACILITY.

Study Complete

**FIGURE EE2: PROPOSED DECATUR, TX, 226D FACILITY
NON CONTOUR OVERLAP WITH KMKT 226C3 SHOWING**

