

Exhibit 13-B
Section 74.1204
Contour Protection to WIL-FM

This comprehensive exhibit has been prepared to demonstrate that proposed FM translator Long Form application BNPFT-20180131AIN will not cause prohibited interference to second adjacent full power FM station WIL-FM, Channel 222C0, St. Louis, Missouri. This statement demonstrates that a lack of population and/or other factors allow this proposal to be compliant with Section 74.1204. The process commonly called “Living Way,” allows for the use of U/D Analysis, also known as “signal strength ratio methodology.” In this instant case the facilities to be protected are second adjacent and are to be afforded protection from signals 40 dB stronger than they present in the location of the proposed antenna location.

The WIL-FM F(50,50) protected contour at the proposed BNPFT-20180131AIN Channel 224D application site is 85.6 dBu. Therefore the proposed new FM translator F(50,10) interfering contour with respect to WIL-FM is the 125.6 dBu contour. Using the FCC's FM propagation curves program (see attached), the 125.6 dBu contour was calculated to extend 37 meters from the antenna.

The proposed transmit antenna would be mounted 82 meters above ground level. The interfering contour will not reach the ground. Therefore it is believed that this application is in compliance with 47 C.F.R. § 74.1204 with respect to WIL-FM.

Select Contour Type:	<div>F(50,50) Service Contour -- FM and NTSC (analog) TV F(50,10) Interfering Contour F(50,90) Digital TV Service Contour</div>
Select Channel Range: (not TV Virtual Channel)	<div>FM Radio or TV Transmit Channels 2-6 TV Transmit Channels 7-13 TV Transmit Channels 14-69</div>
Find This:	<div>Field Strength, given a Distance (in km) Distance, Given a Field Strength (in dBu) FM ERP, given Distance and Field Strength [F(50,50) Service Contour]</div>
<div>.099</div> ERP (kW)	<div></div> Distance (km)
<div>107</div> HAAT (meters)	<div>125.6</div> Field (dBu)
<div>Find Result</div> <div>Clear Form</div>	

Results:

Calculated Distance = **0.037 km**

Free Space equation used to compute distance.

New

St. Louis, MO
BNPFT20180131AIN
Latitude: 38-41-07 N
Longitude: 090-22-54 W
ERP: 0.099 kW
HAAT: 107.24 m
Channel: 224
Frequency: 92.7 MHz
AMSL Height: 272.0 m
Elevation: 190.0 m
Horiz. Pattern: Directional
Vert. Pattern: No

W224DC

Caseyville, IL
BLFT20160729AMT
Latitude: 38-37-46.80 N
Longitude: 090-00-39.60 W
ERP: 0.25 kW
HAAT: 0.0 m
Channel: 224
Frequency: 92.7 MHz
AMSL Height: 318.0 m
Elevation: 174.0 m

W224DC.CP

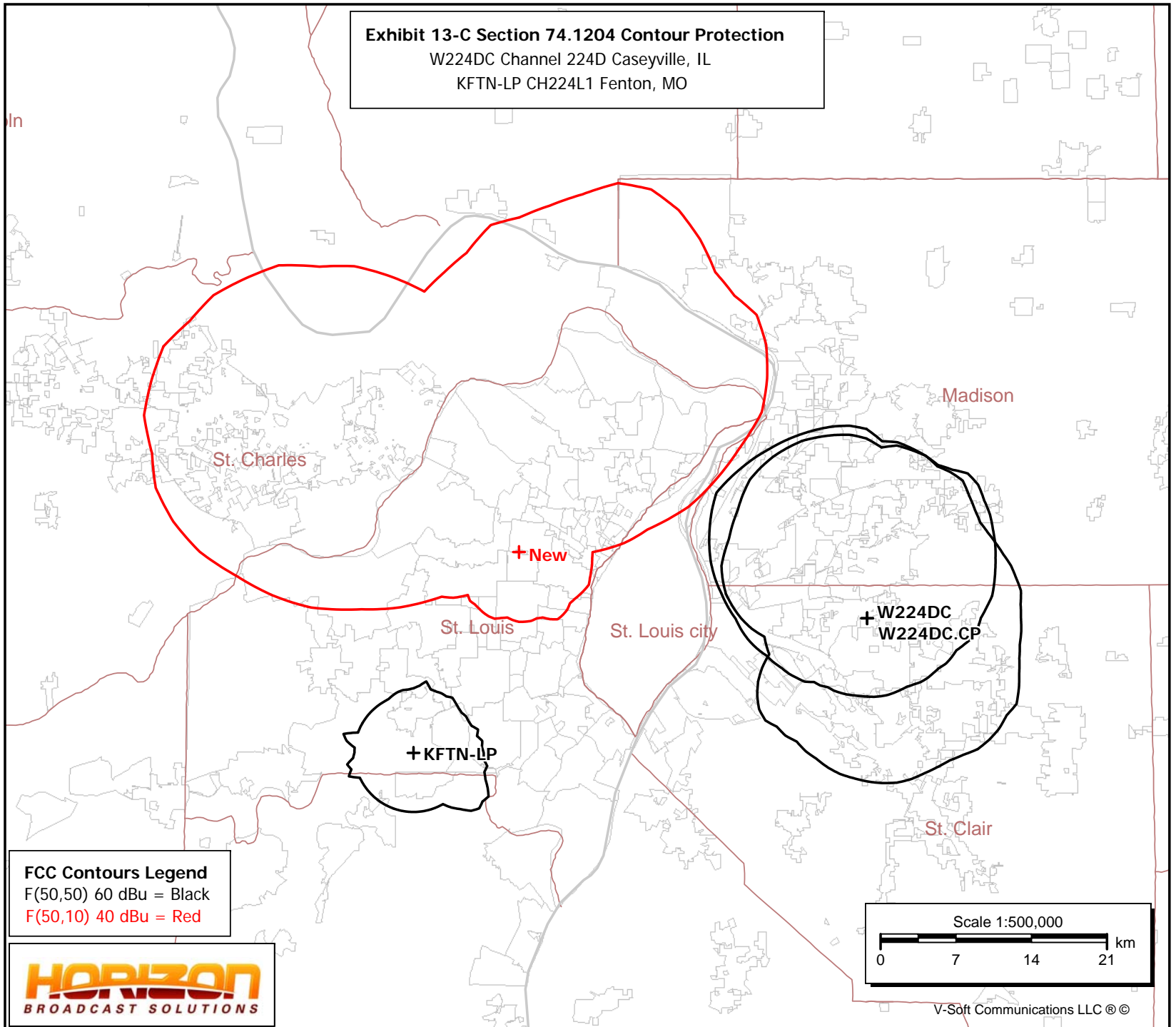
Caseyville, IL
BPFT20180817ABA
Latitude: 38-37-46.80 N
Longitude: 090-00-39.60 W
ERP: 0.25 kW
HAAT: 0.0 m
Channel: 224
Frequency: 92.7 MHz
AMSL Height: 318.0 m
Elevation: 174.0 m

KFTN-LP

Fenton, MO
BLL20150528AEF
Latitude: 38-31-03 N
Longitude: 090-29-37 W
ERP: 0.089 kW
HAAT: 31.51 m
Channel: 224
Frequency: 92.7 MHz
AMSL Height: 203.0 m
Elevation: 179.0 m

Exhibit 13-C Section 74.1204 Contour Protection

W224DC Channel 224D Caseyville, IL
KFTN-LP CH224L1 Fenton, MO



New

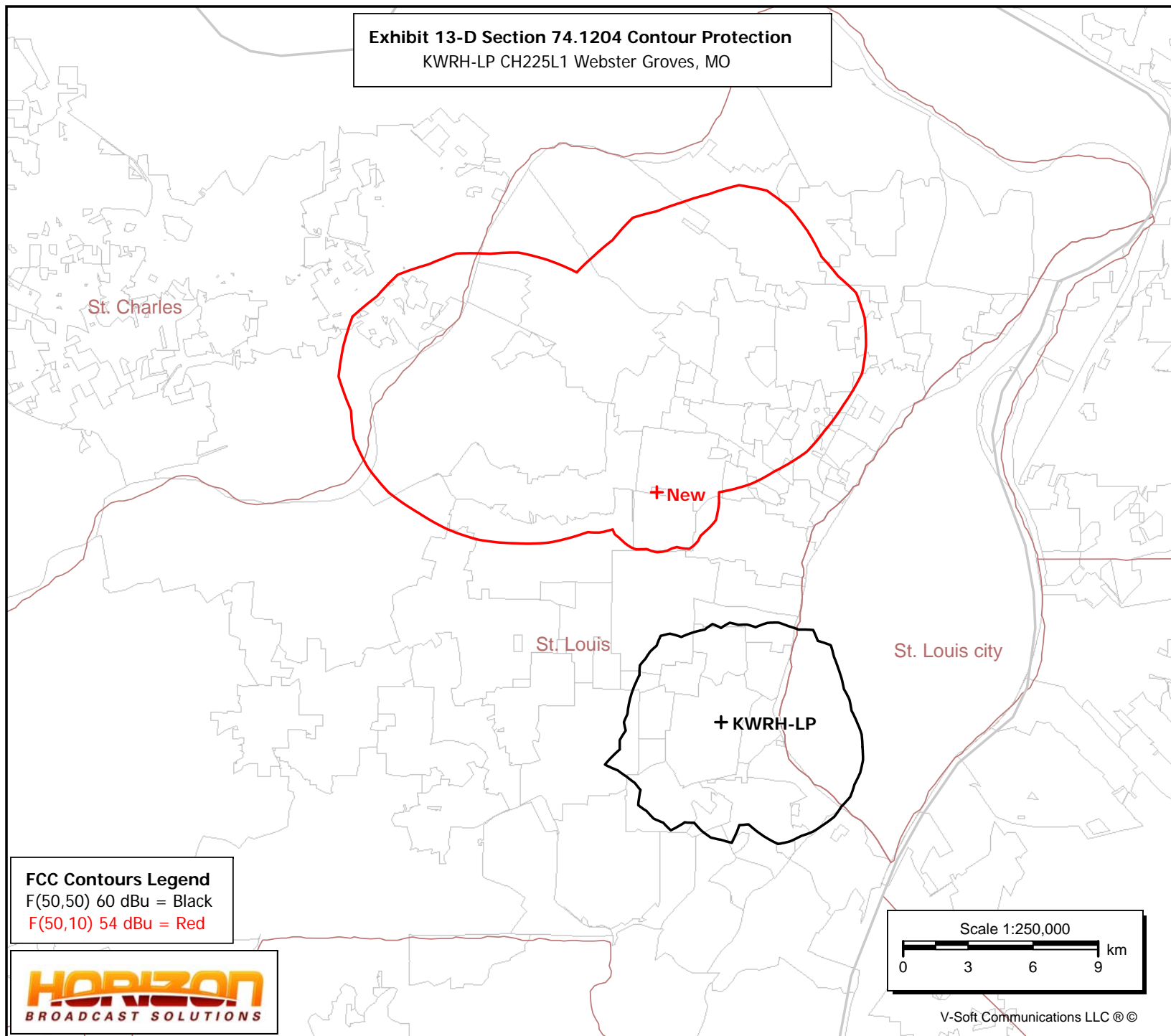
St. Louis, MO
BNPFT20180131AIN
Latitude: 38-41-07 N
Longitude: 090-22-54 W
ERP: 0.099 kW
HAAT: 107.24 m
Channel: 224
Frequency: 92.7 MHz
AMSL Height: 272.0 m
Elevation: 190.0 m
Horiz. Pattern: Directional
Vert. Pattern: No

KWRH-LP

Webster Groves, MO
BLL20180109AAF
Latitude: 38-35-23.20 N
Longitude: 090-20-51.80 W
ERP: 0.036 kW
HAAT: 50.0 m
Channel: 225
Frequency: 92.9 MHz
AMSL Height: 205.2 m
Elevation: 186.0 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

Exhibit 13-D Section 74.1204 Contour Protection

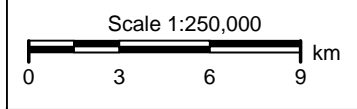
KWRH-LP CH225L1 Webster Groves, MO

**FCC Contours Legend**

F(50,50) 60 dBu = Black

F(50,10) 54 dBu = Red

HORIZON
BROADCAST SOLUTIONS



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New

St. Louis, MO
BNPFT20180131AIN
Latitude: 38-41-07 N
Longitude: 090-22-54 W
ERP: 0.099 kW
HAAT: 107.24 m
Channel: 224
Frequency: 92.7 MHz
AMSL Height: 272.0 m
Elevation: 190.0 m
Horiz. Pattern: Directional
Vert. Pattern: No

New

St. Louis, MO
BNPFT20180130AGG
Latitude: 38-38-08.80 N
Longitude: 090-11-44.60 W
ERP: 0.099 kW
HAAT: 0.0 m
Channel: 227
Frequency: 93.3 MHz
AMSL Height: 298.0 m
Elevation: 143.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: None

Exhibit 13-E Section 74.1204 Contour Protection

New CH227D St. Louis, MO

