

**W266AN
APPLICATION FOR
MINOR MODIFICATIONS
AND REQUEST FOR
MATTOON WAIVER**

This application seeks a change in site and ERP in order to antenna to serve as a fill-in translator for WVLK(AM) at Lexington, KY (#27418).

Request for continued waiver of § 74.1233(a)(1):

This application requests continuation of a waiver to permit a one-step move to a new site to serve as a fill in translator for WVLK(AM) in accordance with the waiver granted for W263AQ's move to Effingham, IL (DA-11-1495) and subsequent grants commonly referred to as the *Mattoon Waiver*.

A waiver of §74.1233(a)(1) of the Commission's rules was requested to permit this move of the W266AN translator from its current licensed site ASR#1030383. In accordance with the waiver granted for the move of W263AQ (DA-11-1495), the proposed W266AN facility is mutually exclusive with the licensed W266AN facility because the proposed 40 dBu (50:10) interfering contour overlaps the existing and licensed W266AN 60 dBu (50:50) contour as demonstrated in see exhibit E1A. It is also noted that this translator has not been "hopped" or modified since its initial construction and licensing in 2007.

Allocation discussion:

All exhibits utilize the V-Soft provided FCC 30 second terrain database.

E1	Channel study
E1A	40 dBu Mattoon overlaps
E1AA	Interference analysis to WSGS
E1B	Interference analysis to 2nd adjacent WVLK-FM
E1C	Aerial views of interference area
E2	60 dBu and 2 mV/m contours plot
E3	ASR

ANDERSON COMMUNICATIONS, LLC

A channel study is included as E1 demonstrating compliance with §74.1204 with the exception of WVLK-FM analyzed below. A plot of the proposed 60 dBu is provided as E2 showing that it is entirely contained within the WVLK(AM) 2 mV/m and 40 km circle.

WVLK-FM analysis:

The W266AN facility will be located inside the protected contour of 3rd adjacent channel stations WMYX-FM on channel 268C3. Therefore, an interference analysis has been conducted based on the U/D ratio of +40 dB at the proposed site. The WVLK-FM (50,50) contour at the proposed site is 72.69 dBu and the (50,10) interference contour is 112.69 dBu. Exhibit E1B demonstrates that this interfering contour is at least 153 meters above ground. An examination of the aerial photographs from Google Earth provided as E1C shows that there are no structures within the 112.69 dBu greater than two stories.

Clearly, this interference contour will not reach any populated area or major highways as is evident from the aerial photograph of the site included as E1C. Based on this showing a waiver of Section 74.1204 is requested in accordance with *Living Way Ministries, Inc.* (FCC 08-242).

RF Exposure Calculation:

The proposed facility will be located at an existing tower (ASR#1030383) using a single bay ERI LPX-1E circularly polarized antenna mounted at 258 meters above ground. The maximum RF contribution of the proposed translator was calculated using **FMMODEL** to be 0.6 $\mu\text{Watts/cm}^2$ at 256 meters or 0.3% of the maximum permissible 200 microwatts/cm² exposure for general population/uncontrolled exposure, and well below 5% of that limit which requires consideration.



Charles M. Anderson 1-29-2015
1519 Euclid Avenue
Bowling Green, KY 42103
270-782-0246

E1 CHANNEL STUDY

REFERENCE
38 02 23.0 N.
84 24 10.0 W.

CH# 266D - 101.1 MHz, Pwr= 0.25 kW DA, HAAT= 269.0 M, COR= 559 M
Average Protected F(50-50)= 7.09 km
Standard Directional

DISPLAY DATES
DATA 01-28-15
SEARCH 01-29-15

CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
266C Hazard	WSGS	CP _CX KY	130.8 311.5	142.89 BPH20111219AEA	37 11 38.0 83 10 52.0	100.000 468	192.6 876	88.4 Mountain Broadcasting Serv	-67.3*	4.7
266C Hazard	WSGS	LIC _EN KY	130.8 311.5	142.89 BLH19871217KD	37 11 38.0 83 10 52.0	100.000 446	191.6 861	87.5 Mountain Broadcasting Serv	-66.3*	5.5
266D Lawrenceburg	W266AN	LIC _C_ KY	268.2 87.9	42.08 BLFT20070413AFY	38 01 37.0 84 52 59.0	0.120 29	19.6 264	5.9 Finley Willis	1.3	-28.3* (1)
268C3 Richmond	WVLK-FM	LIC NCN KY	159.3 339.3	19.08 BLH19970224KA	37 52 45.0 84 19 33.0	9.000 165	3.7 426	37.5 Cumulus Licensing Llc	-4.2*	-19.3* (2)
265L1 Frankfort	NEW	CP _ KY	294.4 114.2	43.45 BNPL20131114APQ	38 12 02.0 84 51 20.0	0.100 16	245	13.9 Kentucky State University	5.8	
264C3 Irvine	WCYO	LIC NCX KY	152.0 332.2	47.64 BMLH20140624AAR	37 39 40.0 84 08 55.0	10.500 154	4.0 429	39.5 Kentucky River Broadcastin	23.8	7.4
266A Erlanger	WIZF	LIC _CX KY	353.6 173.5	119.19 BLH20060721AAQ	39 06 18.0 84 33 25.0	2.500 155	82.1 379	28.2 Blue Chip Broadcasting Lic	15.0	23.9
265A Lebanon	WLSK	LIC NCX KY	244.8 64.2	89.01 BLH20121024ACZ	37 41 43.0 85 19 06.0	3.900 126	42.9 345	27.8 Choice Radio Central Corpo	25.5	29.7
267A Manchester	WAGX	LIC _CN OH	45.4 225.8	89.14 BLH19921027KA	38 36 03.0 83 40 22.0	3.000 91	31.3 328	21.0 Jewell Schaeffer Broadcast	36.4	35.6
269A Shelbyville	WVKY	LIC _CN KY	286.3 105.8	69.91 BMLH19960521KA	38 12 48.0 85 10 16.0	6.000 100	2.6 338	26.9 Southern Belle, Llc	45.7	41.6
265A Madison	AL7021	VAC _ IN	317.9 137.3	117.57 RM11113	38 49 15.0 85 18 46.0	6.000 100	53.2 338	35.6 Rodgers Broadcasting Corp.	42.7	49.3
263C2 Louisville	WLGX	LIC _CX KY	280.1 99.5	99.39 BLH20090818AAV	38 11 30.8 85 31 21.2	37.000 169	5.7 367	50.7 Clear Channel Broadcasting	72.2	47.6

Terrain database is FCC NGDC 30 Sec , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= East Zone, Co to 3rd adjacent.
All separation margins (if shown) include rounding. Call signs with strikeout need not be protected.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside restricted contour.

(1) Mattoon 40 dBu overlap.

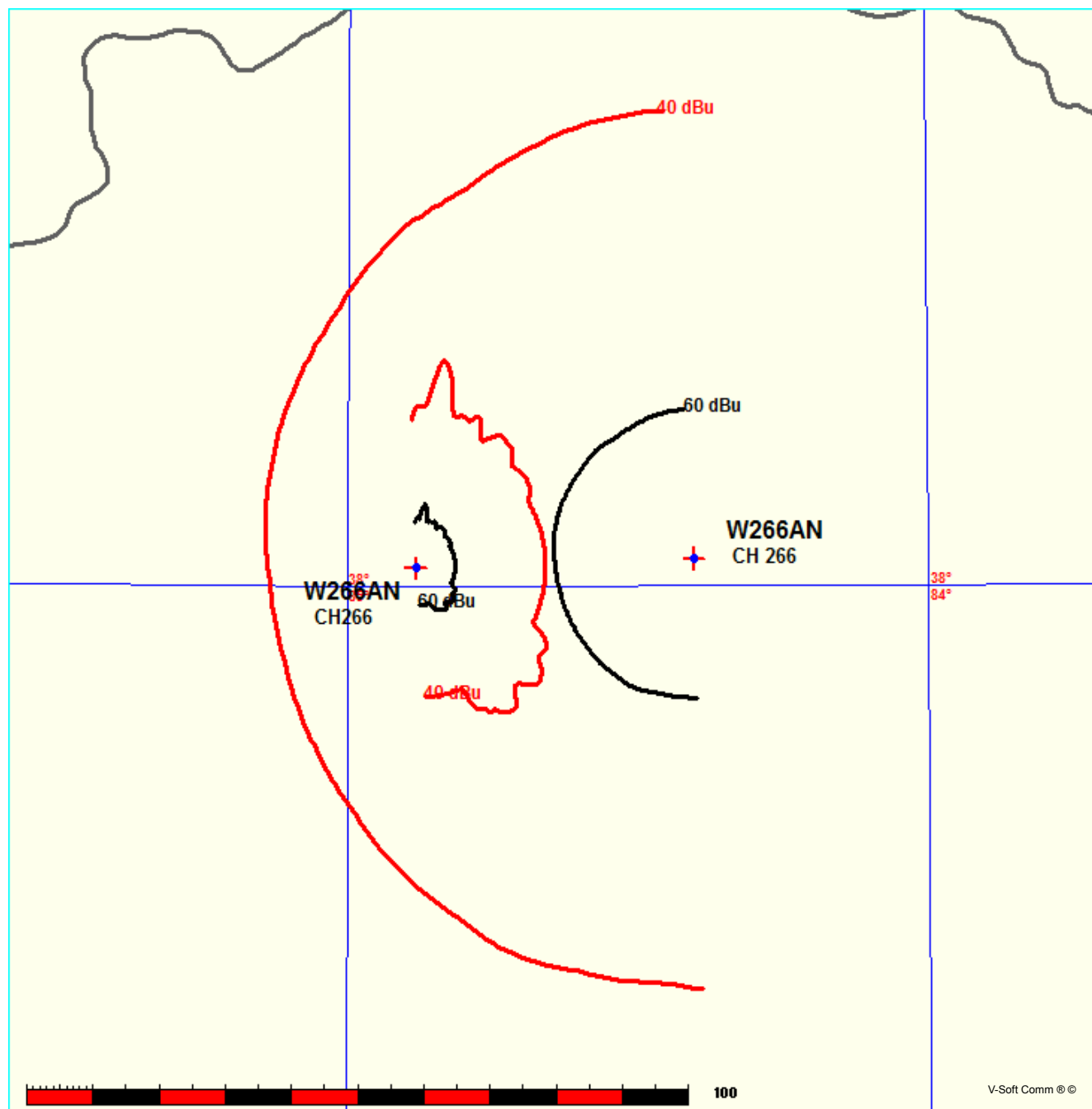
(2) See E1B for disproof of WVLK-FM interference.

E1A W266AN MATTOON 40 DBU OVERLAP TO LICENSED 60 DBU

FMCommander Single Allocation Study - 01-29-2015 - FCC NGDC 30 Sec
W266AN's Overlaps (In= 1.28 km, Out= -28.34 km)

W266AN CH 266 D DA
Lat= 38 02 22.0, Lng= 84 24 11.0
0.25 kW 269 M HAAT, 559 M COR
Prot.= 60 dBu, Intef.= 40 dBu

W266AN CH 266 D BLFT20070413AFY
Lat= 38 01 37.0, Lng= 84 52 59.0
0.12 kW 29.4 M HAAT, 264 M COR
Prot.= 60 dBu, Intef.= 40 dBu

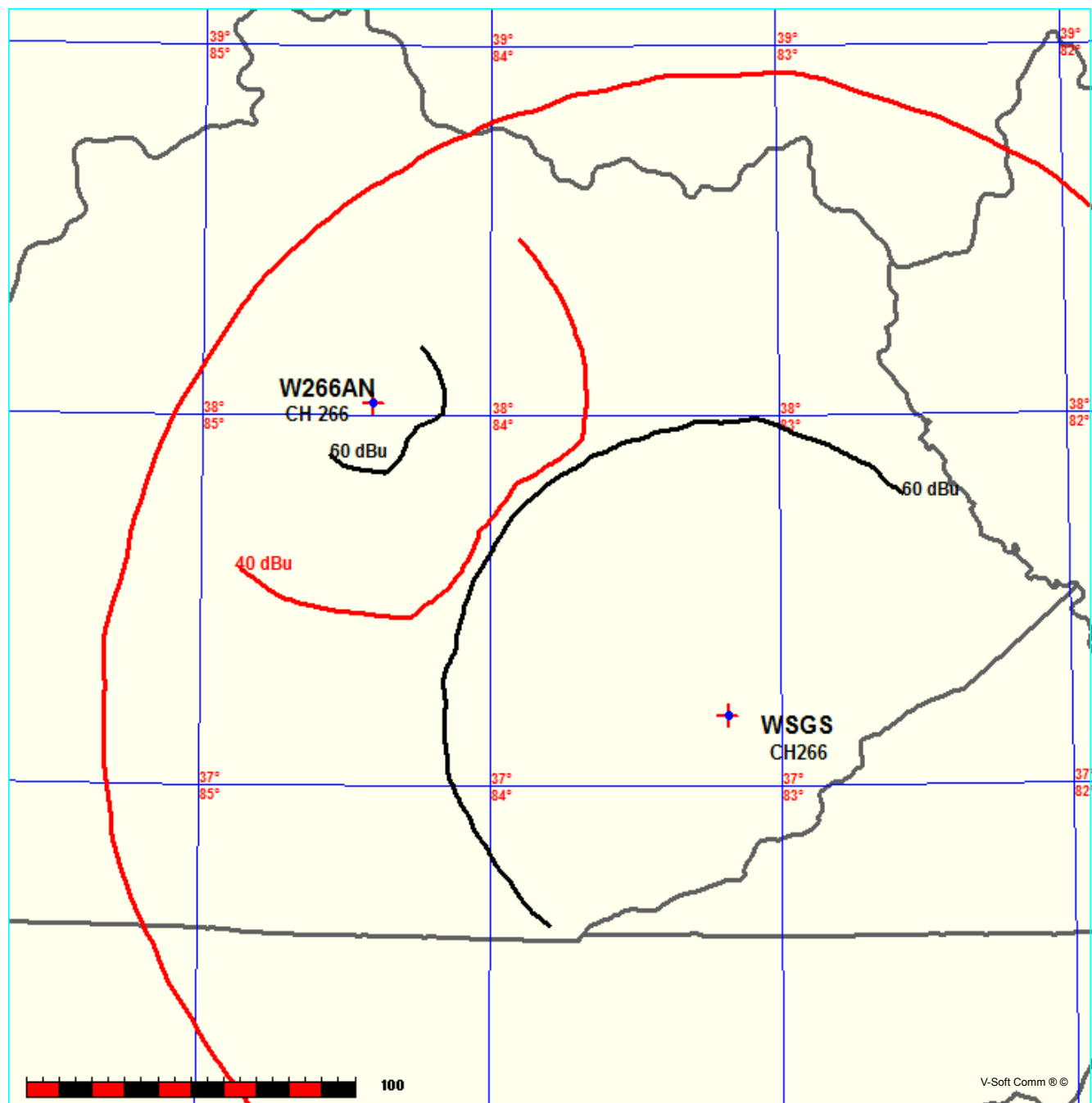


E1AA W266AN - WSGS PLOT

FMCommander Single Allocation Study - 01-29-2015 - FCC NGDC 30 Sec
W266AN's Overlaps (In= -67.31 km, Out= 4.68 km)

W266AN CH 266 D DA
Lat= 38 02 23.0, Lng= 84 24 10.0
0.25 kW 269 M HAAT, 559 M COR
Prot.= 60 dBu, Intef.= 40 dBu

WSGS-C CH 266 C BPH20111219AEA
Lat= 37 11 38.0, Lng= 83 10 52.0
100.0 kW 468 M HAAT, 875.7 M COR
Prot.= 60 dBu, Intef.= 40 dBu



E1B WVLK-FM ANALYSIS

W266AN LEXINGTON, KY

74.1204(d) Showing

Translator or LPFM Maximum Licensed ERP = 0.25

Translator or LPFM Antenna Height AG = 258 Meters

W266AN Antenna Model = LPX-1E

Protected Station's Contour = 72.68579 dBu

Translator's or LPFM's full Interference contour 112.68579

Review Azimuth = 0 Degrees True

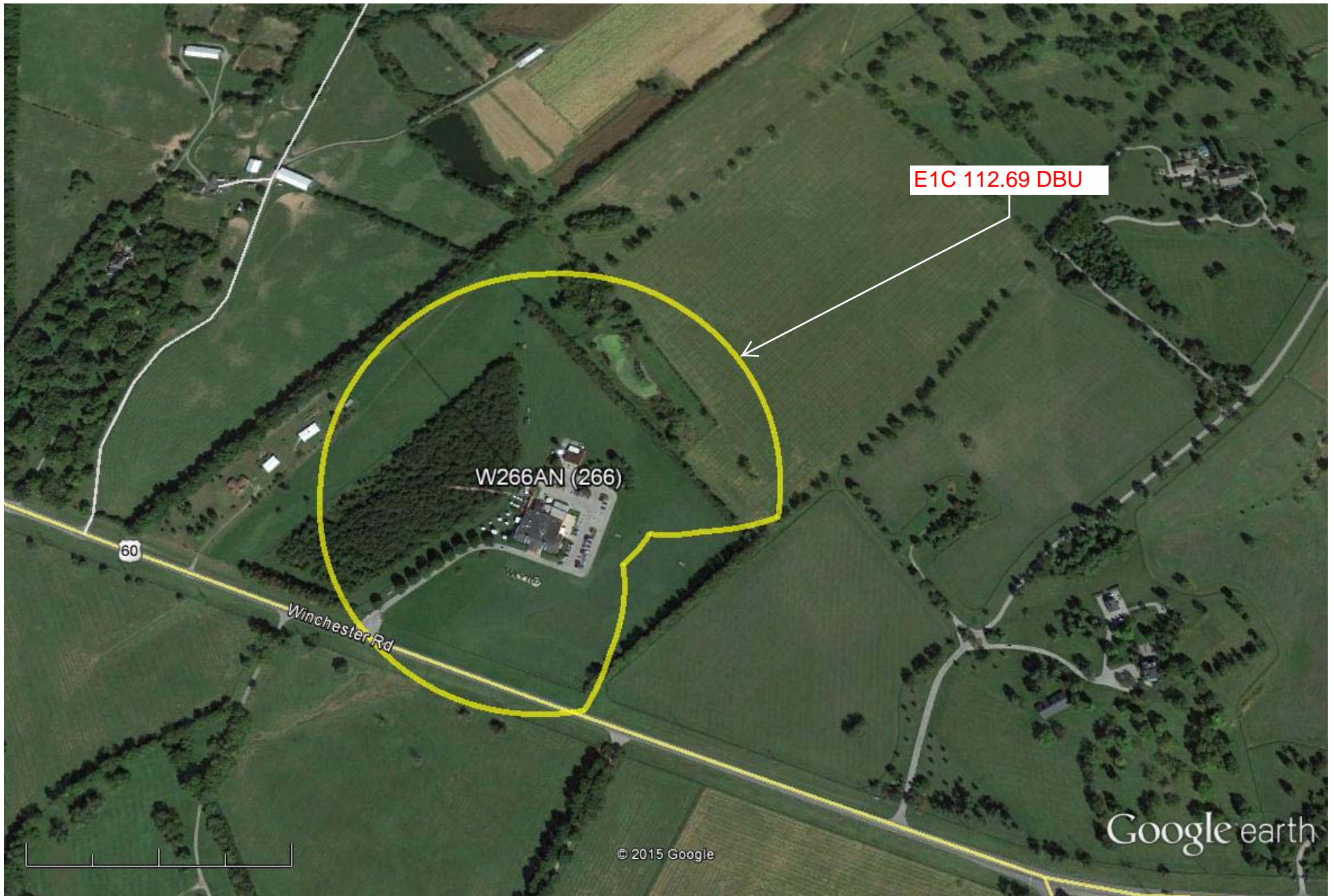
Relative Field on the horizon at Review Azimuth = 1.000

Translator/LPFM ERP on the horizon at Review Azimuth = 0.25 kW

Distance between stations = 19.1 km

Protected Station= WVLK-F, 9 kW, 426 M Meters COR AMSL

Depression Angle From Horizon(Deg)	Vertical Relative Field	Horizontal Relative Field	ERP (kw)	Dist to IX Contour Along Dep. Angle(m)	Dist to IX Contour From Tower Base(m)	Height IX Above Ground (m)
00.00	1.0	1.0	0.2500	257.4427	257.4427	258.000
05.00	0.993	1.0	0.2465	255.6405	254.6678	235.719
10.00	0.974	1.0	0.2372	250.7491	246.9397	214.458
15.00	0.941	1.0	0.2214	242.2535	233.9989	195.300
20.00	0.897	1.0	0.2012	230.9261	216.9995	179.019
25.00	0.843	1.0	0.1777	217.0242	196.6907	166.282
30.00	0.78	1.0	0.1521	200.8053	173.9025	157.597
35.00	0.709	1.0	0.1257	182.5268	149.5172	153.307
40.00	0.633	1.0	0.1002	162.9612	124.8355	153.251
45.00	0.554	1.0	0.0767	142.6232	100.8499	157.150
50.00	0.473	1.0	0.0559	121.7704	078.2725	164.718
55.00	0.394	1.0	0.0388	101.4324	058.1792	174.911
60.00	0.317	1.0	0.0251	081.6093	040.8047	187.324
65.00	0.245	1.0	0.0150	063.0735	026.6560	200.836
70.00	0.181	1.0	0.0082	046.5971	015.9372	214.213
75.00	0.124	1.0	0.0038	031.9229	008.2623	227.165
80.00	0.077	1.0	0.0015	019.8231	003.4422	238.478
85.00	0.041	1.0	0.0004	010.5551	000.9199	247.485
90.00	0.016	1.0	0.0001	004.1191	000.0000	253.881



Google earth

feet 2000
meters 800



Graph is Relative Field

Azi	Field	dBk	kw
000	1.000	-06.021	0.250
010	1.000	-06.021	0.250
020	1.000	-06.021	0.250
030	1.000	-06.021	0.250
040	1.000	-06.021	0.250
050	1.000	-06.021	0.250
060	1.000	-06.021	0.250
070	1.000	-06.021	0.250
080	1.000	-06.021	0.250
090	1.000	-06.021	0.250
100	1.000	-06.021	0.250
110	0.700	-09.119	0.122
120	0.500	-12.041	0.063
130	0.500	-12.041	0.063
140	0.500	-12.041	0.063
150	0.650	-09.762	0.106
160	0.800	-07.959	0.160
170	1.000	-06.021	0.250
180	1.000	-06.021	0.250
190	1.000	-06.021	0.250
200	1.000	-06.021	0.250
210	1.000	-06.021	0.250
220	1.000	-06.021	0.250
230	1.000	-06.021	0.250
240	1.000	-06.021	0.250
250	1.000	-06.021	0.250
260	1.000	-06.021	0.250
270	1.000	-06.021	0.250
280	1.000	-06.021	0.250
290	1.000	-06.021	0.250
300	1.000	-06.021	0.250
310	1.000	-06.021	0.250
320	1.000	-06.021	0.250
330	1.000	-06.021	0.250
340	1.000	-06.021	0.250
350	1.000	-06.021	0.250

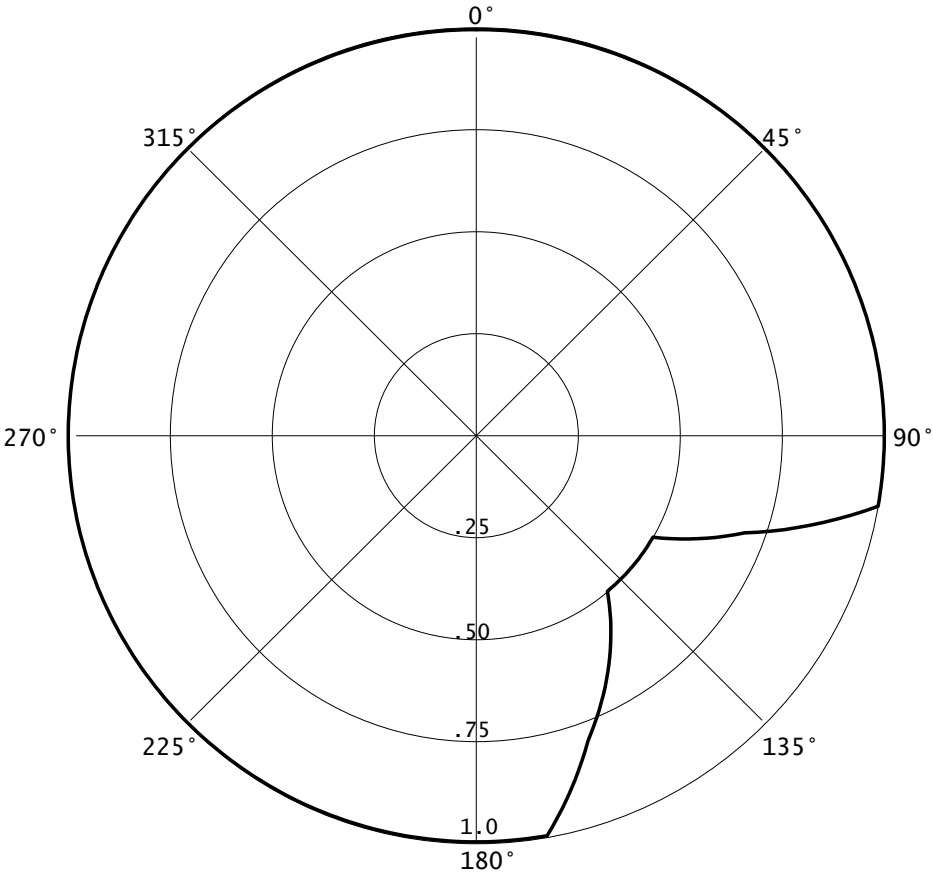
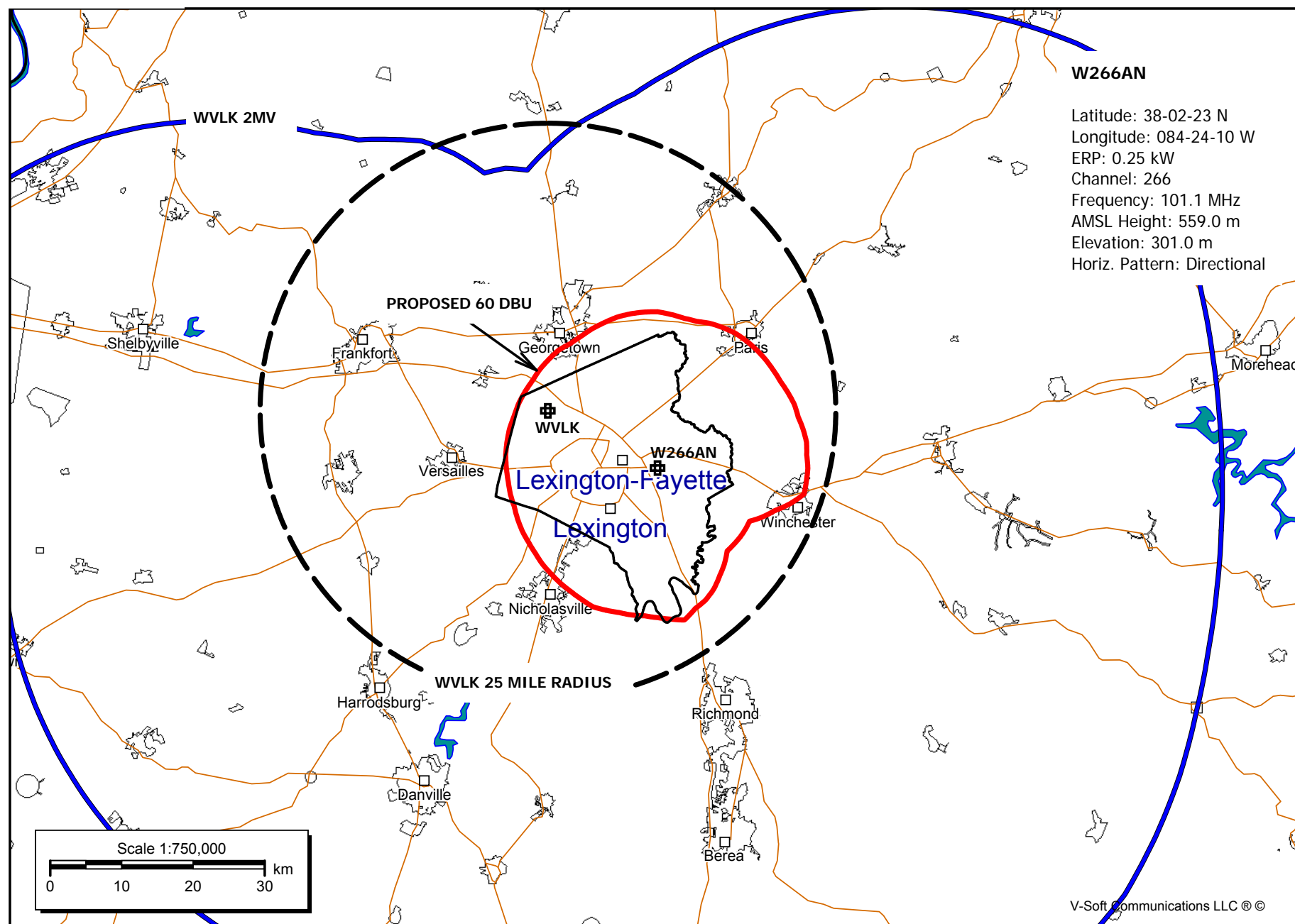


EXHIBIT E2

Anderson Communications, LLC



E3 Registration 1030383

 [Map Registration](#)

Registration Detail

Reg Number	1030383	Status	Constructed
File Number	A0775041	Constructed	01/01/1989
EMI	No	Dismantled	
NEPA	No		

Antenna Structure

Structure Type TOWER - Free standing or Guyed Structure used for Commu

Location (in NAD83 Coordinates)

Lat/Long	38-02-23.0 N 084-24-10.0 W	Address	2851 WINCHESTER RD
City, State	LEXINGTON , KY		
Zip	40516	County	FAYETTE
Center of AM Array		Position of Tower in Array	

Heights (meters)

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
301.4	304.8
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
606.2	298.7

Painting and Lighting Specifications

FCC Paragraphs 1, 3, 7, 16, 21

FAA Notification

FAA Study	FAA Issue Date
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Owner & Contact Information

FRN	0008003097	Owner Entity Type
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Owner

Gray Television Group, Inc.	P: (404)266-8333
Attention To: General Counsel	F:
4370 Peachtree Road, NE	E:
Atlanta , GA 30319	

Contact

Stewart , Joan Esq	P: (202)719-7438
1776 K Street, NW	F:
Washington , DC 20006	E: jstewart@wileyrein.com

Last Action Status

Status	Constructed	Received	05/14/2012
Purpose	Admin Update	Entered	05/14/2012
Mode	Interactive		

Related Applications

05/14/2012	A0775041	- Admin Update (AU)
01/06/2011	A0710288	- Admin Update (AU)
04/20/2004	A0373589	- Admin Update (AU)

Output from NADCON for station W266AN

North American Datum Conversion

NAD 83 to NAD 27

NADCON Program Version 2.11

Transformation #: 1 Region: Conus

	Latitude	Longitude
NAD 27 datum values:	38 02 22.72029	84 24 10.23243
NAD 83 datum values:	38 02 23.00000	84 24 10.00000
NAD 27 - NAD 83 shift values:	-0.27971	0.23243(secs.)
	-8.624	5.668 (meters)
Magnitude of total shift:		10.320(meters)



NGS HOME PAGE