

**W236CR
MATTOON WAIVER**

The proposed translator will rebroadcast WTLC(AM) (facility ID # 51433). W236CR has been constructed and a form 350 filed - BLFT-20151014AEP.

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

This application requests a move to ASR#1253064 to serve as a fill in translator for WTLC(AM) (facility ID #51433) 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*.

In accordance with the waiver granted for the move of W263AQ (DA-11-1495), the proposed W236CR (formerly 290CT) facility is mutually exclusive with the constructed and license applied for W236CR facility on channel 236 because the proposed 40 dBu (50:10) interfering contour overlaps the existing built and license applied for W226CR 60 dBu (50:50) contour and the original "long form CP" 60 dBu as demonstrated in exhibit E1A.

It is also noted that the facility has not been "hopped". It has operated at the current site since construction. The recent changes in channel and antenna at site do not constitute a "hop" in accordance with Commission policy and precedent.

Allocation discussion:

All exhibits utilize the FCC 30 second terrain database.

- E1 Channel study
- E1A Interference analysis to WFBQ
- E1B Interference analysis to WFMS
- E1C Aerial photograph of interference area
- E1D DA pattern and vertical tabulation
- E2 60 dBu and 2 mV/m contours
- E3 ASR

A channel study is included as E1 demonstrating compliance with §74.1204 with the exception of 2nd adjacent channel stations. A plot of the proposed 60 dBu contour is provided as

E2 showing that it is entirely contained within primary station WTLC(AM)'s 2 mV/m and 40 km radius.

WFBQ and WFMS analyses:

The proposed facility will be located inside the protected contours of WFMQ on 238B and WFMS on 238B. Interference analyses have been conducted based on the U/D ratio of +40 dB at the proposed site and are includecas E1A and E1B. The worst case interference contour to WFMS falls at least 147.4 meters AGL.

It is clear from E1C that the interference contour will not reach any populated area or major highways. 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 utilize an ERI 100A single bay circularly polarized antenna with a center of radiation at 207 meters AGL on existing tower ASR#1227148. The RF contribution of the proposed translator was calculated using the formula included below to be 0.4 $\mu\text{Watts}/\text{cm}^2$ or 0.2% of the maximum permissible 200 microwatts/cm² exposure for general population/uncontrolled exposure, and well below the 5% of that limit which requires consideration. The proposed translator clearly complies with Commission RF radiation limits.

$$S \text{ (RF in } \mu\text{Watts}/\text{cm}^2) = \frac{33.4 (F^2 \text{ Vertical Factor}) \times (H \text{ ERP} + V \text{ ERP in Watts})}{R^2 \text{ (distance to radiation center in meters} - 2 \text{ m)}}$$

E1 CHANNEL STUDY

REFERENCE CH# 236D - 95.1 MHz, Pwr= 0.25 kw DA, HAAT= 211.2 M, COR= 463.8 M DISPLAY DATES
 39 53 40.0 N. Average Protected F(50-50)= 19.03 km DATA 09-26-15
 86 12 21.0 W. Standard Directional SEARCH 09-26-15

| CH CITY | CALL | TYPE STATE | ANT AZI <-- | DIST FILE # | LAT LNG | PWR(kw) HAAT(M) | INT(km) COR(M) | PRO(km) LICENSEE | *IN* (Overlap in km) | *OUT* |
|----------------------|--------|---------------|-------------------|--------------------------|--------------------------|--------------------|-------------------|------------------------------------|-------------------------|------------|
| 234B Indianapolis | WFBQ | LIC _CN IN | 77.0 257.0 | 0.41 BLH19980707KB | 39 53 43.0 86 12 04.0 | 58.000 245 | 7.8 502 | 75.6 Capstar Tx LLC | -27.0* | -77.1* (1) |
| 238B Fishers | WFMS | LIC _CX IN | 129.2 309.3 | 22.31 BLH20101203ABU | 39 46 03.0 86 00 12.0 | 13.000 302 | 5.5 555 | 66.3 Radio License Holding Src | -2.8 | -45.9* (1) |
| 236A Nashville | WVNI | LIC NCN IN | 191.4 11.2 | 75.20 BLH19970904KB | 39 13 52.0 86 22 40.0 | 3.800 105 | 80.6 329 | 25.2 Brown County Broadcasters, | -21.1* | 2.5 |
| 236D Frankfort | W291CS | APP DV_ IN | 329.0 148.8 | 53.06 BPFT20150910AEE | 40 18 12.0 86 31 40.0 | 0.100 | 10.9 278 | 2.6 Kaspar Broadcasting Co, In | 24.8 | -8.7* |
| 236D Frankfort | W291CS | APP DV_ IN | 329.0 148.8 | 53.06 BPFT20150910AEE | 40 18 12.0 86 31 40.0 | 0.100 | 3.1 278 | 1.6 Kaspar Broadcasting Co, In | 31.6 | -6.9* |
| 236B Fort Wayne | WAJI | LIC _CN IN | 32.2 212.9 | 159.47 BLH19900226KE | 41 06 13.0 85 11 28.0 | 39.000 207 | 140.7 453 | 69.7 Sarkes Tarzian, Inc. | 0.2 | 14.1 |
| 289B Indianapolis | WYXB | LIC ZCX IN | 129.2 309.3 | 22.31 BLH20030403AAC | 39 46 03.0 86 00 12.0 | 50.000 150 | 0.0 398 | 0.0 Emmis Radio License, LLC | 14.5R | 7.8M |
| 237A Brookston | WBPE | LIC NCN IN | 323.2 142.8 | 90.80 BLH19920702KC | 40 32 48.0 86 50 59.0 | 2.300 154 | 43.1 351 | 28.6 Artistic Media Partners, I | 29.4 | 35.0 |
| 290D Frankfort | W291CS | CP DV_ IN | 329.0 148.8 | 53.06 BPFT20150610ABG | 40 18 12.0 86 31 40.0 | 0.100 | 0.0 278 | 0.0 Kaspar Broadcasting Co, In | 9.5R | 43.6M |
| 236D Terre Haute | W236AE | LIC _CN IN | 245.8 65.1 | 112.86 BLFT19960930TJ | 39 28 21.0 87 24 20.0 | 0.038 54 | 18.4 213 | 5.6 The Trustees Of Indiana Un | 75.7 | 48.5 |
| 235A Danville | WRHK | LIC _CN IL | 286.6 105.8 | 113.10 BLH19930415KA | 40 10 40.0 87 28 55.0 | 6.000 100 | 46.0 295 | 29.8 Neuhoff Media Danville, LI | 49.0 | 56.1 |

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.
 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) See E1B, E1C and E1D for disproof of interference.

W236CR.APP

Latitude: 39-53-40 N
 Longitude: 086-12-21 W
 ERP: 0.25 kW
 Channel: 236
 Frequency: 95.1 MHz
 AMSL Height: 462.0 m
 Elevation: 255.0 m
 Horiz. Pattern: Directional

W236CR 236 CP-BUILT

Latitude: 40-18-12 N
 Longitude: 086-31-40 W
 ERP: 0.10 kW
 Channel: 236
 Frequency: 95.1 MHz
 AMSL Height: 278.0 m
 Elevation: 256.0 m
 Horiz. Pattern: Directional

LONG FORM CP

Latitude: 40-17-19 N
 Longitude: 086-31-48 W
 ERP: 0.25 kW
 Channel: 291
 Frequency: 106.1 MHz
 AMSL Height: 294.0 m
 Elevation: 259.0 m
 Horiz. Pattern: Omni

W236CR 60 DBU BUILT AND 350 FILED

PROPOSED 40 DBU (50:10) MATTOON OVERLAP

ORIGINAL W291CS LONG FORM CP 60 DBU

W236CR

LONG FORM CP

W236CR.APP

Scale 1:500,000

0 7 14 21 km

E1B

W291CS INDIANAPOLIS, IN

74.1204(d) Showing

Translator or LPFM Maximum Licensed ERP = 0.25

Translator or LPFM Antenna Height AG = 207 Meters

W291CS Antenna Model = ERI-100A-1

Protected Station's Contour = 132.2267 dBu

Translator's or LPFM's full Interference contour 172.2267

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 = 0.4 km

Protected Station= WFBQ, 58 kW, 502 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 | 000.2714 | 000.2714 | 207.000 |
| 05.00 | 0.993 | 1.0 | 0.2465 | 000.2695 | 000.2685 | 206.977 |
| 10.00 | 0.974 | 1.0 | 0.2372 | 000.2644 | 000.2603 | 206.954 |
| 15.00 | 0.941 | 1.0 | 0.2214 | 000.2554 | 000.2467 | 206.934 |
| 20.00 | 0.897 | 1.0 | 0.2012 | 000.2435 | 000.2288 | 206.917 |
| 25.00 | 0.843 | 1.0 | 0.1777 | 000.2288 | 000.2074 | 206.903 |
| 30.00 | 0.78 | 1.0 | 0.1521 | 000.2117 | 000.1833 | 206.894 |
| 35.00 | 0.709 | 1.0 | 0.1257 | 000.1924 | 000.1576 | 206.890 |
| 40.00 | 0.633 | 1.0 | 0.1002 | 000.1718 | 000.1316 | 206.890 |
| 45.00 | 0.554 | 1.0 | 0.0767 | 000.1504 | 000.1063 | 206.894 |
| 50.00 | 0.473 | 1.0 | 0.0559 | 000.1284 | 000.0825 | 206.902 |
| 55.00 | 0.394 | 1.0 | 0.0388 | 000.1069 | 000.0613 | 206.912 |
| 60.00 | 0.317 | 1.0 | 0.0251 | 000.0860 | 000.0430 | 206.925 |
| 65.00 | 0.245 | 1.0 | 0.0150 | 000.0665 | 000.0281 | 206.940 |
| 70.00 | 0.181 | 1.0 | 0.0082 | 000.0491 | 000.0168 | 206.954 |
| 75.00 | 0.124 | 1.0 | 0.0038 | 000.0337 | 000.0087 | 206.967 |
| 80.00 | 0.077 | 1.0 | 0.0015 | 000.0209 | 000.0036 | 206.979 |
| 85.00 | 0.041 | 1.0 | 0.0004 | 000.0111 | 000.0010 | 206.989 |
| 90.00 | 0.016 | 1.0 | 0.0001 | 000.0043 | 000.0000 | 206.996 |

E1C

W291CS INDIANAPOLIS, IN

74.1204(d) Showing

Translator or LPFM Maximum Licensed ERP = 0.25

Translator or LPFM Antenna Height AG = 207 Meters

W291CS Antenna Model = ERI-100A-1

Protected Station's Contour = 77.57471 dBu

Translator's or LPFM's full Interference contour 117.57471

Review Azimuth = 0 Degrees True

Relative Field on the horizon at Review Azimuth = 1.000

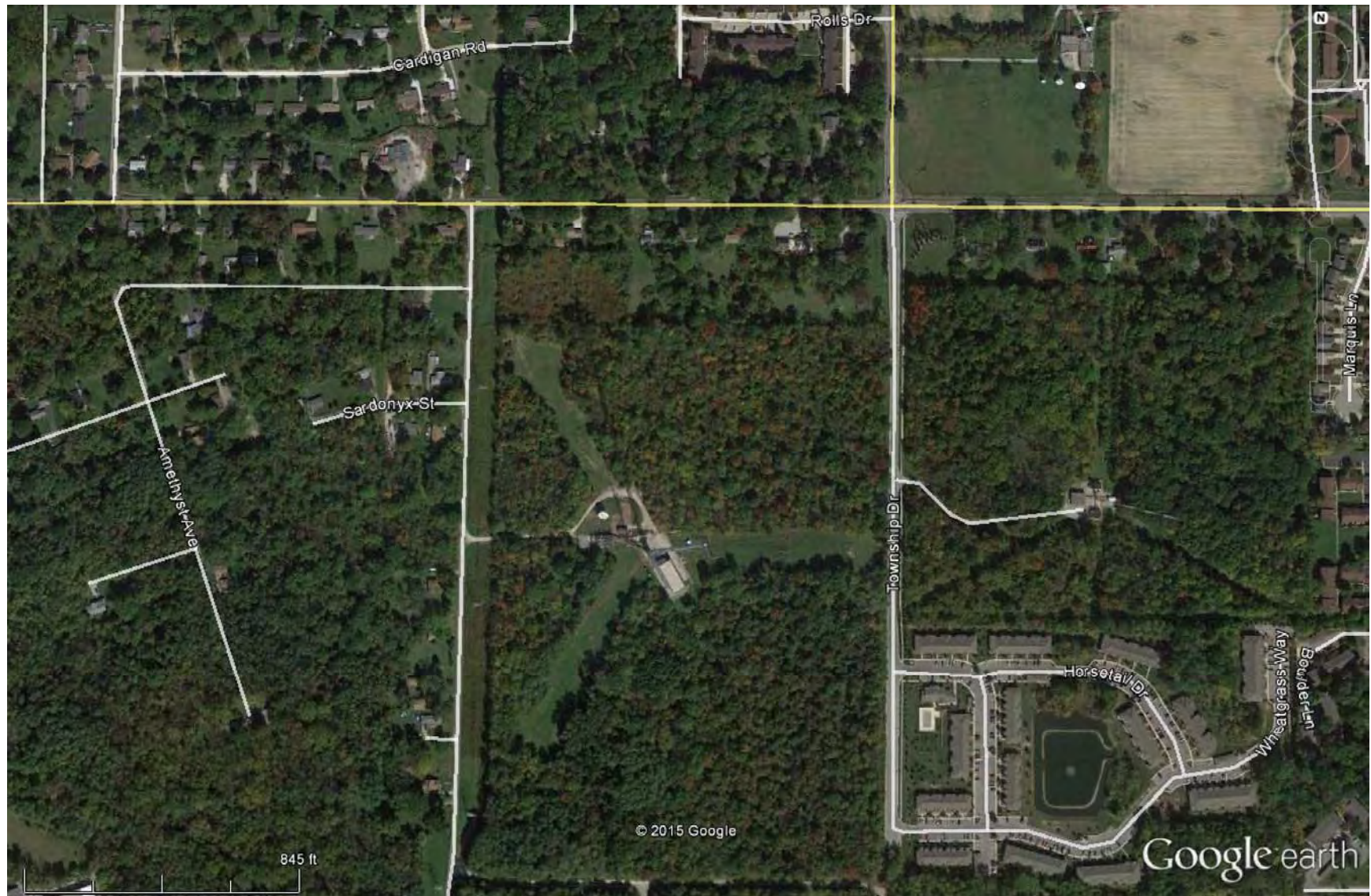
Translator/LPFM ERP on the horizon at Review Azimuth = 0.25 kW

Distance between stations = 22.3 km

Protected Station= WFMS, 13 kW, 554.6 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 | 146.6339 | 146.6339 | 207.000 |
| 05.00 | 0.993 | 1.0 | 0.2465 | 145.6075 | 145.0534 | 194.309 |
| 10.00 | 0.974 | 1.0 | 0.2372 | 142.8215 | 140.6517 | 182.199 |
| 15.00 | 0.941 | 1.0 | 0.2214 | 137.9825 | 133.2809 | 171.287 |
| 20.00 | 0.897 | 1.0 | 0.2012 | 131.5306 | 123.5984 | 162.014 |
| 25.00 | 0.843 | 1.0 | 0.1777 | 123.6124 | 112.0309 | 154.759 |
| 30.00 | 0.78 | 1.0 | 0.1521 | 114.3745 | 099.0512 | 149.813 |
| 35.00 | 0.709 | 1.0 | 0.1257 | 103.9635 | 085.1619 | 147.369 |
| 40.00 | 0.633 | 1.0 | 0.1002 | 092.8193 | 071.1037 | 147.337 |
| 45.00 | 0.554 | 1.0 | 0.0767 | 081.2352 | 057.4420 | 149.558 |
| 50.00 | 0.473 | 1.0 | 0.0559 | 069.3579 | 044.5824 | 153.869 |
| 55.00 | 0.394 | 1.0 | 0.0388 | 057.7738 | 033.1377 | 159.674 |
| 60.00 | 0.317 | 1.0 | 0.0251 | 046.4830 | 023.2415 | 166.745 |
| 65.00 | 0.245 | 1.0 | 0.0150 | 035.9253 | 015.1827 | 174.441 |
| 70.00 | 0.181 | 1.0 | 0.0082 | 026.5407 | 009.0775 | 182.060 |
| 75.00 | 0.124 | 1.0 | 0.0038 | 018.1826 | 004.7060 | 189.437 |
| 80.00 | 0.077 | 1.0 | 0.0015 | 011.2908 | 001.9606 | 195.881 |
| 85.00 | 0.041 | 1.0 | 0.0004 | 006.0120 | 000.5240 | 201.011 |
| 90.00 | 0.016 | 1.0 | 0.0001 | 002.3461 | 000.0000 | 204.654 |

E1D AERIAL PHOTOGRAPH OF SITE AREA



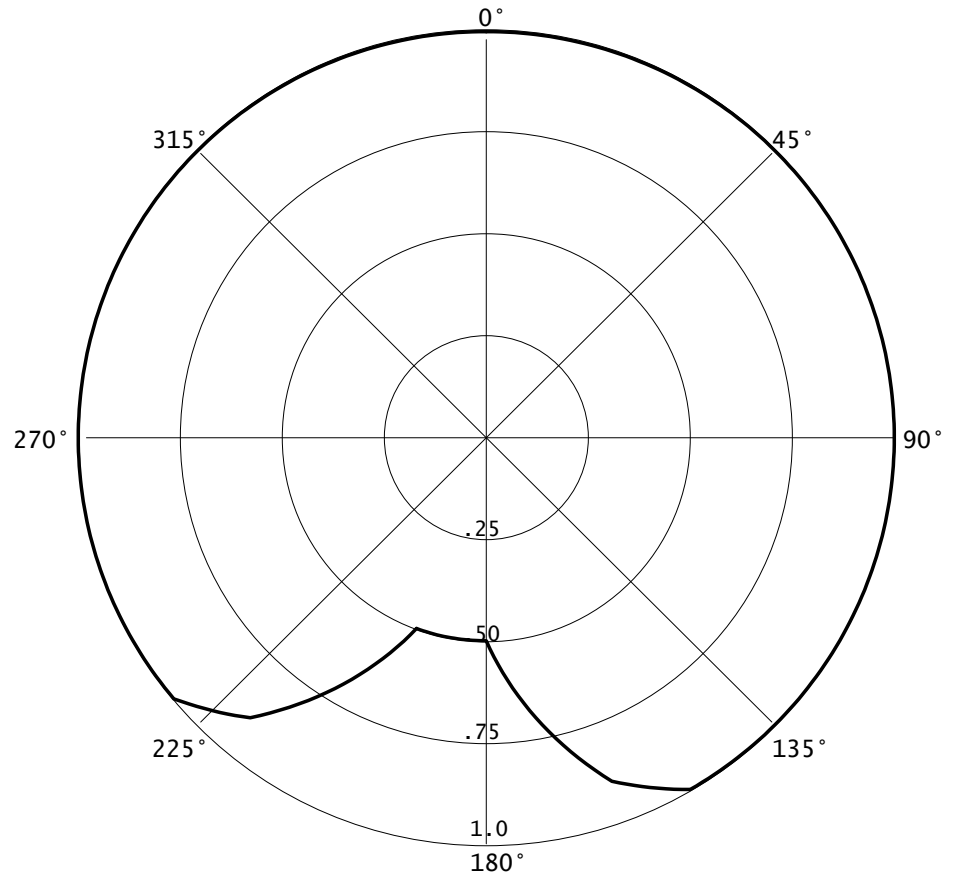
09-26-2015

RMS(V)= .948

E1E DA TABULATION

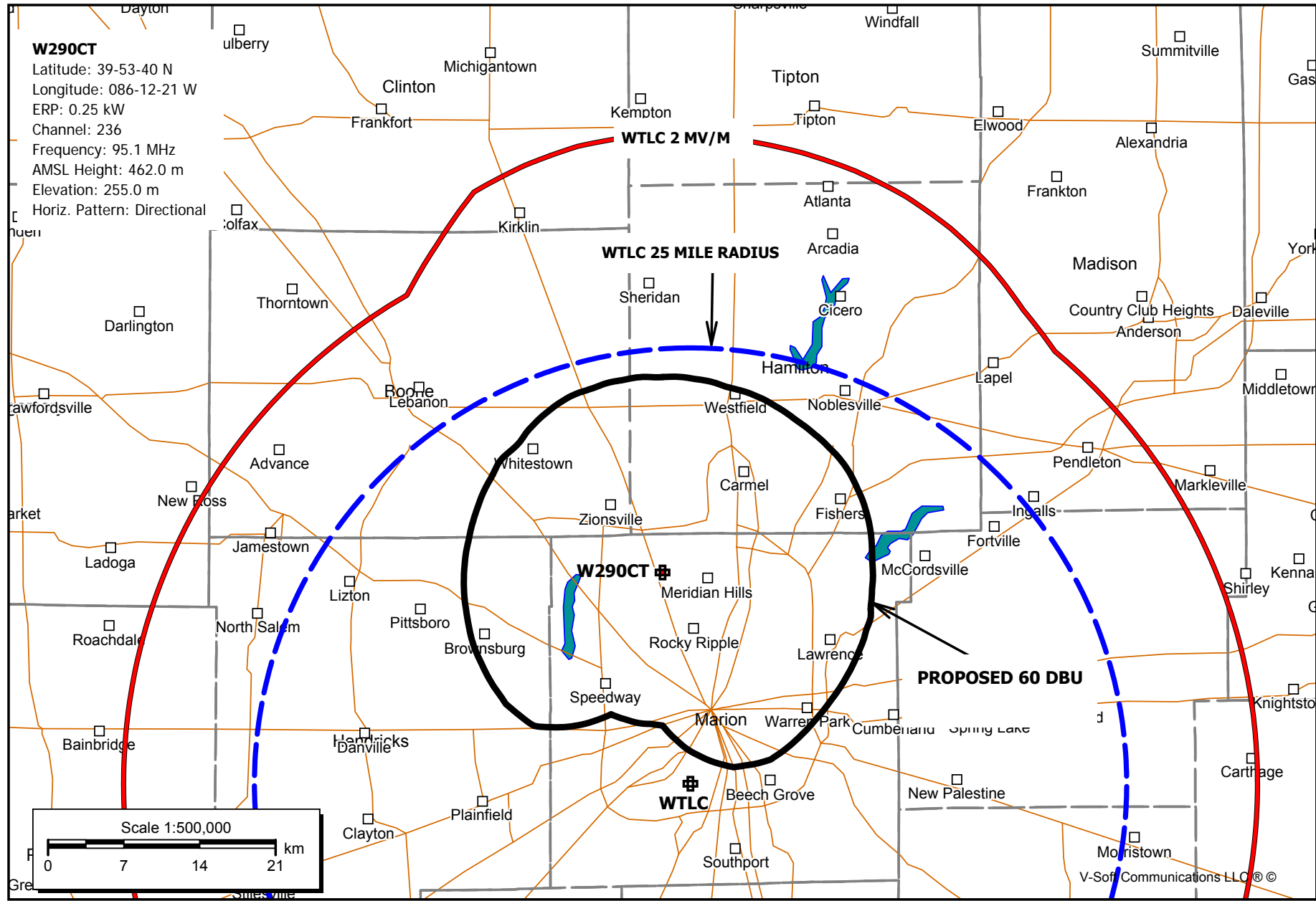
Graph is Relative Field

| 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 | 1.000 | -06.021 | 0.250 |
| 120 | 1.000 | -06.021 | 0.250 |
| 130 | 1.000 | -06.021 | 0.250 |
| 140 | 1.000 | -06.021 | 0.250 |
| 150 | 1.000 | -06.021 | 0.250 |
| 160 | 0.900 | -06.936 | 0.202 |
| 170 | 0.700 | -09.119 | 0.122 |
| 180 | 0.500 | -12.041 | 0.063 |
| 190 | 0.500 | -12.041 | 0.063 |
| 200 | 0.500 | -12.041 | 0.063 |
| 210 | 0.700 | -09.119 | 0.122 |
| 220 | 0.900 | -06.936 | 0.202 |
| 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 |



E2 CONTOURS

Anderson Communications, LLC



Registration Detail

| | | | |
|-------------|----------|-------------|-------------|
| Reg Number | 1253064 | Status | Constructed |
| File Number | A0898199 | Constructed | 07/24/2006 |
| EMI | No | Dismantled | |
| NEPA | No | | |

Antenna Structure

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

Location (in NAD83 Coordinates)

| | | | |
|-----------------------|----------------------------|-------------------------------|-------------------|
| Lat/Long | 39-53-40.0 N 086-12-21.0 W | Address | 7701 Walnut Drive |
| City, State | Indianapolis , IN | | |
| Zip | 46268 | County | MARION |
| Center of AM Array | | Position of Tower in Array | |

Heights (meters)

| | |
|--|---|
| Elevation of Site Above Mean Sea Level | Overall Height Above Ground (AGL) |
| 254.5 | 307.8 |
| Overall Height Above Mean Sea Level | Overall Height Above Ground w/o Appurtenances |
| 562.3 | 259.0 |

Painting and Lighting Specifications

FAA Chapters 4, 9, 12
Paint and Light in Accordance with FAA Circular Number 70/7460-1K

FAA Notification

| | | | |
|-----------|-----------------|----------------|------------|
| FAA Study | 2005-AGL-965-OE | FAA Issue Date | 06/23/2005 |
|-----------|-----------------|----------------|------------|

Owner & Contact Information

| | | | |
|--------------|------------|-------------------|---------------------------|
| FRN | 0011498342 | Owner Entity Type | Limited Liability Company |
| Assignor FRN | 0006154249 | Assignor ID | L00167959 |

Owner

American Tower, LLC
Attention To: FAA/FCC
10 Presidential Way
Woburn , MA 01801
P: (781)926-4500
F:
E: FAA-FCC@americantower.com

Contact

Attention To: FAA/FCC
10 Presidential Way
Woburn , MA 01801
P: (561)886-3925
F:
E: FAA-FCC@americantower.com

Last Action Status

| | | | |
|---------|--------------|----------|------------|
| Status | Constructed | Received | 04/14/2014 |
| Purpose | Change Owner | Entered | 04/14/2014 |
| Mode | Interactive | | |

Related Applications

| | | |
|------------|----------|---------------------|
| 04/14/2014 | A0898199 | - Change Owner (OC) |
| 11/12/2009 | A0656926 | - Admin Update (AU) |

05/01/2007 A0548178 - Notification (NT)

Related applications (4)

Comments

Comments

None

History

| Date | Event |
|------------|---------------------------------|
| 04/15/2014 | Registration Printed |
| 04/15/2014 | Change of Ownership Letter Sent |
| 04/14/2014 | Change of Ownership Received |

All History (10)

Automated Letters

| | |
|------------|------------------------------------|
| 04/15/2014 | Authorization, Reference |
| 04/15/2014 | Ownership Change, Reference 795714 |
| 11/13/2009 | Authorization, Reference |

All letters (5)

CLOSE WINDOW