Comprehensive Engineering Exhibit
Minor Change W246BT

This is one of two applications of a coordinated contingent group of minor change applications involving stations W256BT and W26BO, along with the surrender of the permit of W245BX. This exhibit is for the minor change modification application of translator W246BT seeking to change the antenna type and to become a fill-in facility for station WJRR.

The station antenna is mounted on an antenna structure Identified by registration number 100072 at 79 meters above ground level. This application seeks modification of the facility to specify a standard pattern Scala CA5-FM/CP/RM, rotated to 250° True with no other change in operating parameters.

Below as Figure 2 is an overlap and spacing study from which it can be determined that this proposal is within the protected contour of second adjacent channel station WPCV and third adjacent channel station WDBO-FM. The study reflects W246BO(prp) as modified in the contingent filed application onto first adjacent channel 245, and indicates that this proposal will not create prohibited contour overlap with contingent filed application, and W246BO(prp) is to be considered as filed prior to this instant application in relation to prohibited contour overlap with the W246BO(prp) facility.

Section 74.1204(d) states that "*The provisions of this section concerning prohibited overlap will not apply where the area of such overlap lies entirely over water. In addition, an application otherwise precluded by this section will be accepted if it can be demonstrated that no actual interference will occur due to intervening terrain, lack of population or such other factors as may be applicable*."

We will demonstrate that a lack of population and/or other factors allow this proposal to be compliant with 74.1204. The process commonly called "Living Way"[1], allows for the use of U/D Analysis, also known as "signal strength ratio methodology" to be utilized. 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.

Figure 3 is a map showing the predicted signal contours of WDBO-FM and WPCV more than 500 meters from the proposed antenna location utilizing the FCC F50:50 curve. WBDO-FM has a stronger signal in the area of this proposed location than WPCV does. Thus, protection of the WPCV 71.25 dBu contour from a signal produced by this proposal exceeding 111.25 is required, and by protecting this "weaker" signal as compared to WDBO-FM, the protection requirements are demonstrated.

The antenna is located 79 meters above ground level upon the support structure shown in Figure 4. Utilizing the line of sight equation[2] it has been determined that a 111.25 dBu signal developed

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[1] As recently described in FCC 08-242 in connection with BPFT-19981001TA

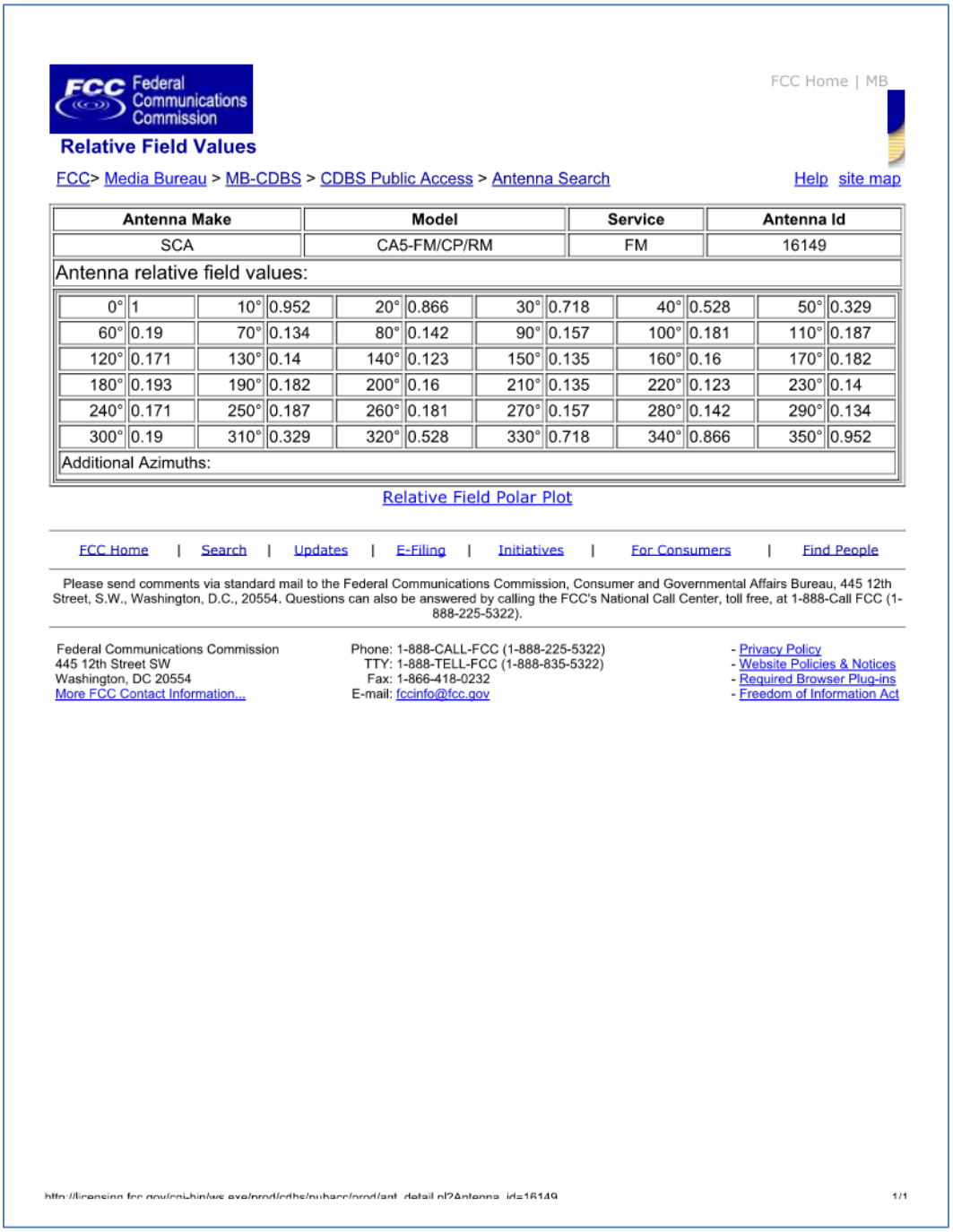
[2] ReachDistMeters=106.92-(20*(LOG10[DistMeters]/1000)))+[ERPin dBk]

by 27 watts, emitted by the proposed antenna, does not reach the habitable space, as demonstrated in Figure 5.

A map of the proposed and licensed 60 dBu contours is given in Figure 6, demonstrating compliance with the contour overlap requirement for minor change applications. Also made part of Figure 6 is the 60 dBu contour of the primary station, establishing compliance with fill-in requirements.

In accordance with 47 C.F.R. 1.1307(b)(1) Table 1, only “Part 74 – Subpart L” facility with an ERP greater than 100 watts, is subject to routine environmental evaluation. Since the facility proposed in this application will operate with an ERP of less than 100 watts, it is “categorically excluded from making such studies or preparing an EA” [1.1307(b)(1)] the licensee will fully cooperate with other site users to temporarily reduce power or cease broadcasting, as necessary, to protect workers and others having access to the site from excessive levels of RF Radiation.

Figure 1. Antenna Pattern



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Relative Field Values

FCC> Media Bureau > MB-CDBS > CDBS Public Access > Antenna Search

Help site map

Antenna Make	Model	Service	Antenna Id
SCA	CA5-FM/CP/RM	FM	16149

Antenna relative field values:

0°	1	10°	0.952	20°	0.866	30°	0.718	40°	0.528	50°	0.329
60°	0.19	70°	0.134	80°	0.142	90°	0.157	100°	0.181	110°	0.187
120°	0.171	130°	0.14	140°	0.123	150°	0.135	160°	0.16	170°	0.182
180°	0.193	190°	0.182	200°	0.16	210°	0.135	220°	0.123	230°	0.14
240°	0.171	250°	0.187	260°	0.181	270°	0.157	280°	0.142	290°	0.134
300°	0.19	310°	0.329	320°	0.528	330°	0.718	340°	0.866	350°	0.952

Additional Azimuths:

Relative Field Polar Plot

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Federal Communications Commission
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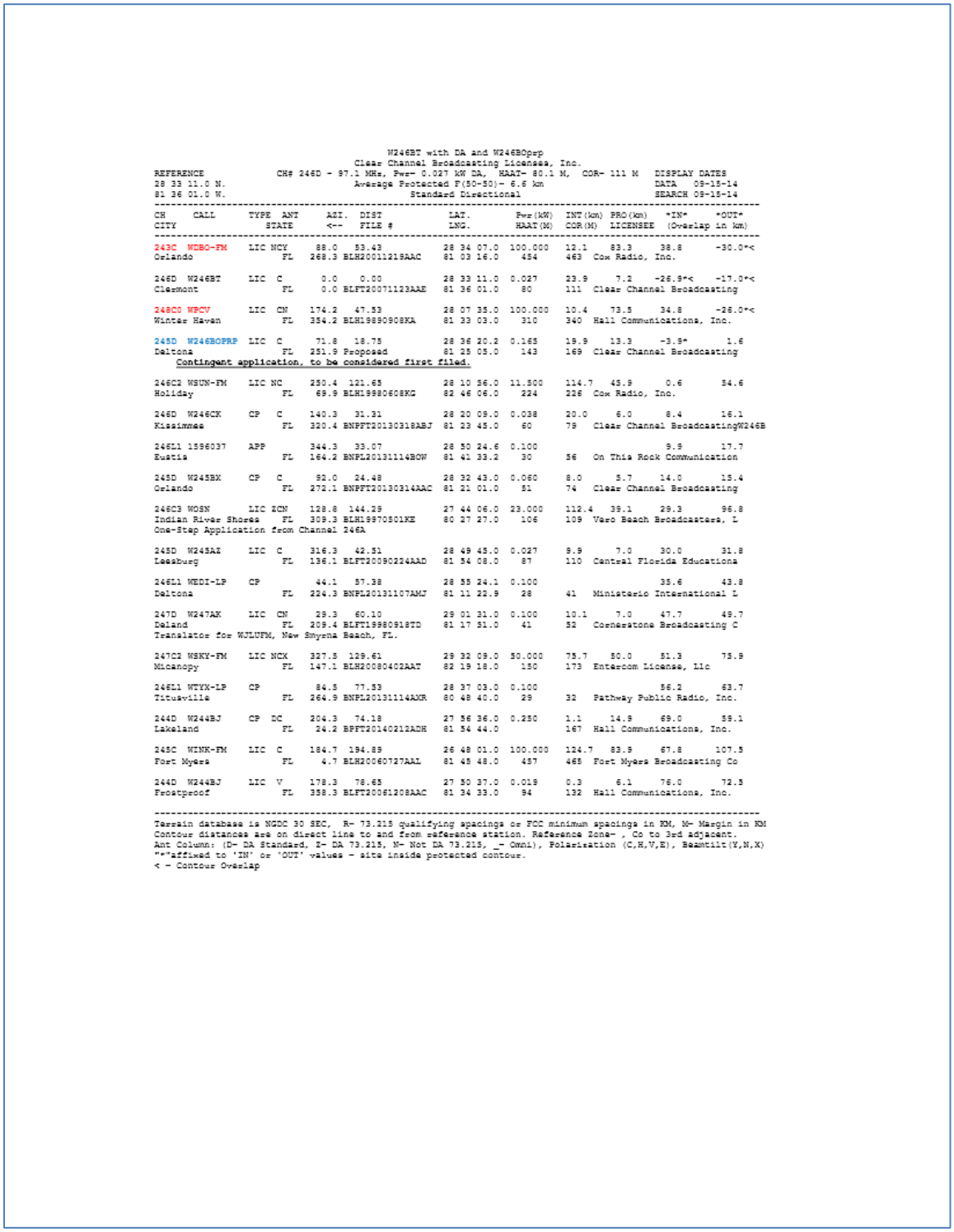
http://licensing.fcc.gov/cgi-bin/ws.exe/prod/cdbs/pubacc/prod/ant_detail.pl?Antenna_id=16149 1/1

Figure 2. Overlap and Spacing Study



W246BT with DA and W246BOprp
Clear Channal Broadcasting Licensss, Inc.

REFERENCE — CH# 246D - 97.1 MHz, Pwr- 0.027 kW DA, HAAT- 80.1 M, COR- 111 M — DISPLAY DATES
28 33 11.0 N. — Average Protected F(50-50)- 6.6 km — DATA 09-15-14
81 36 01.0 W. — Standard Directional — SEARCH 09-15-14

CH CALL	TYPE ANT	AZI. DIST	LAT.	Pwr(kW)	INT(km) PRO(km)	*IN*	*OUT*
CITY	STATE	<-- FILE #	LNG.	HAAT(M)	COR(M) LICENSEE	(Overlap in km)	
243C WDBO-FM	LIC NCY	88.0 53.43	28 34 07.0	100.000	12.1 83.3	38.8	-30.0*<
Orlando	FL	268.3 BLH20011219AAC	81 03 16.0	454	463 Cox Radio, Inc.		
246D W246BT	LIC C	0.0 0.00	28 33 11.0	0.027	23.9 7.2	-26.8*<	-17.0*<
Clermont	FL	0.0 BLFT20071123AAE	81 36 01.0	80	111 Clear Channal Broadcasting		
248C0 WPCV	LIC CN	174.2 47.53	28 07 35.0	100.000	10.4 73.5	34.8	-26.0*<
Winter Haven	FL	354.2 BLH19890908KA	81 33 03.0	310	340 Hall Communications, Inc.		
245D W246BOPRP	LIC C	71.8 18.75	28 36 20.2	0.165	19.9 13.3	-3.9*	1.6
Deltona	FL	251.9 Proposed	81 25 05.0	143	169 Clear Channal Broadcasting		
Contingent application, to be considered first filed.							
246C2 WSUN-FM	LIC NC	250.4 121.65	28 10 56.0	11.500	114.7 45.9	0.6	54.6
Holiday	FL	69.9 BLH19980608KG	82 46 06.0	224	226 Cox Radio, Inc.		
246D W246CK	CP C	140.3 31.31	28 20 09.0	0.038	20.0 6.0	8.4	16.1
Kissimmee	FL	320.4 BNPFT20130318ABJ	81 23 45.0	60	79 Clear Channal BroadcastingW246B		
246L1 1596037	APP	344.3 33.07	28 50 24.6	0.100		9.9	17.7
Eustis	FL	164.2 BNPL20131114BOW	81 41 33.2	30	56 On This Rock Communication		
245D W245BX	CP C	92.0 24.48	28 32 43.0	0.060	8.0 5.7	14.0	15.4
Orlando	FL	272.1 BNPFT20130314AAC	81 21 01.0	91	74 Clear Channal Broadcasting		
246C3 WOSN	LIC ICN	128.8 144.29	27 44 06.0	23.000	112.4 39.1	29.3	96.8
Indian River Shores	FL	309.3 BLH19970501KE	80 27 27.0	106	109 Vero Beach Broadcasters, L		
One-Step Application from Channel 246A							
245D W245AZ	LIC C	316.3 42.51	28 49 45.0	0.027	9.9 7.0	30.0	31.8
Leesburg	FL	136.1 BLFT20090224AAD	81 54 08.0	87	110 Central Florida Educationa		
246L1 WEDI-LP	CP	44.1 57.38	28 55 24.1	0.100		35.6	43.8
Deltona	FL	224.3 BNPL20131107AMJ	81 11 22.9	28	41 Ministerio International L		
247D W247AK	LIC CN	29.3 60.10	29 01 31.0	0.100	10.1 7.0	47.7	49.7
Deland	FL	209.4 BLFT19980918TD	81 17 51.0	41	52 Cornerstone Broadcasting C		
Translator for WJLUFM, New Smyrna Beach, FL.							
247C2 WSKY-FM	LIC NCX	327.5 129.61	29 32 09.0	50.000	75.7 50.0	51.3	75.9
Micanopy	FL	147.1 BLH20080402AAT	82 19 18.0	150	173 Entercom License, Llc		
246L1 WTYX-LP	CP	84.5 77.53	28 37 03.0	0.100		56.2	63.7
Titusville	FL	264.9 BNPL20131114AXR	80 48 40.0	29	32 Pathway Public Radio, Inc.		
244D W244BJ	CP DC	204.3 74.18	27 56 36.0	0.250	1.1 14.9	69.0	59.1
Lakeland	FL	24.2 BFFT20140212ADH	81 54 44.0		167 Hall Communications, Inc.		
245C WIMK-FM	LIC C	184.7 194.89	26 48 01.0	100.000	124.7 83.9	67.8	107.5
Fort Myers	FL	4.7 BLH20060727AAL	81 45 48.0	457	465 Fort Myers Broadcasting Co		
244D W244BJ	LIC V	178.3 78.65	27 50 37.0	0.019	0.3 6.1	76.0	72.5
Frostproof	FL	358.3 BLFT20061208AAC	81 34 33.0	94	132 Hall Communications, Inc.		

Terrain database is NGDC 30 SEC, R- 73.215 qualifying spacings or FCC minimum spacings in KM, M- Margin in KM
Contour distances are on direct line to and from reference station. Reference Zone- , Co to 3rd adjacent.
Ant Column: (D- DA Standard, I- 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 protected contour.
< - Contour Overlap

Figure 3. Contour Map

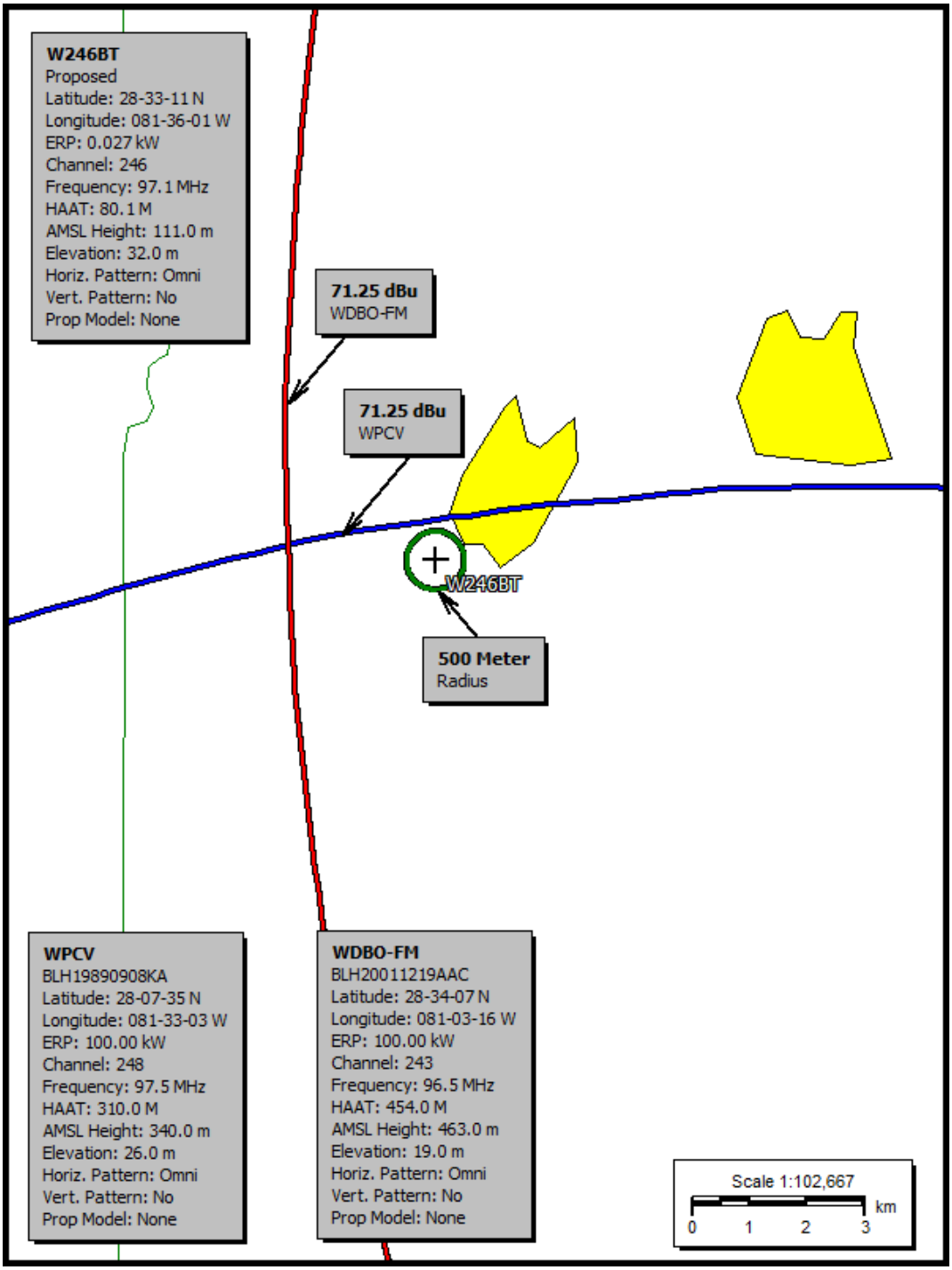


Figure 4. View of Antenna Location.

Figure 5. Distance to Signal Level Table.

Proposed Antenna:	CA5-FM/CP/RM	
Proposed Power:	0.027	kW
Antenna Height AGL:	79	meters
Interference Contour:	111.27	dBu
Artificial Rcv Antenna Height:	2	meters

Fill in "yellow" cells

Distance (Free Space) Equation: =(10^((106.92-[desired dBu]+[ERP in dBk])/20))*1000

Field Strength (dBu) Equation "=106.92-(20*(LOG10[DistMeters]/1000)))+[ERPin dBk]

Depression Angle Below Horizon	Antenna Relative Field	ERP in kW	ERP in dBk	Distance from Ant. to Interf Contour	Distance from Ant. to Artificial Plane	Field Strength in dBu @ Artificial Plane	Distance from Ant. to Ground Level	Field Strength in dBu @ Ground Level
0°	1.000	0.027	-15.69	99.58 m	infinite	---	infinite	---
-5°	0.982	0.026	-15.84	97.79 m	883.48 m	92.15 dBu	906.42 m	91.93 dBu
-10°	0.952	0.024	-16.11	94.80 m	443.43 m	97.87 dBu	454.94 m	97.65 dBu
-15°	0.915	0.023	-16.46	91.12 m	297.51 m	100.99 dBu	305.23 m	100.77 dBu
-20°	0.866	0.020	-16.94	86.24 m	225.13 m	102.94 dBu	230.98 m	102.71 dBu
-25°	0.796	0.017	-17.67	79.27 m	182.20 m	104.04 dBu	186.93 m	103.82 dBu
-30°	0.718	0.014	-18.56	71.50 m	154.00 m	104.61 dBu	158.00 m	104.38 dBu
-35°	0.628	0.011	-19.73	62.54 m	134.25 m	104.63 dBu	137.73 m	104.41 dBu
-40°	0.528	0.008	-21.23	52.58 m	119.79 m	104.12 dBu	122.90 m	103.90 dBu
-45°	0.423	0.005	-23.16	42.12 m	108.89 m	103.02 dBu	111.72 m	102.80 dBu
-50°	0.329	0.003	-25.34	32.76 m	100.52 m	101.53 dBu	103.13 m	101.31 dBu
-55°	0.247	0.002	-27.83	24.60 m	94.00 m	99.63 dBu	96.44 m	99.40 dBu
-60°	0.190	0.001	-30.11	18.92 m	88.91 m	97.83 dBu	91.22 m	97.61 dBu
-65°	0.142	0.001	-32.64	14.14 m	84.96 m	95.70 dBu	87.17 m	95.47 dBu
-70°	0.134	0.000	-33.14	13.34 m	81.94 m	95.51 dBu	84.07 m	95.28 dBu
-75°	0.135	0.000	-33.08	13.44 m	79.72 m	95.81 dBu	81.79 m	95.59 dBu
-80°	0.142	0.001	-32.64	14.14 m	78.19 m	96.42 dBu	80.22 m	96.19 dBu
-85°	0.150	0.001	-32.16	14.94 m	77.29 m	96.99 dBu	79.30 m	96.77 dBu
-90°	0.157	0.001	-31.77	15.63 m	77.00 m	97.42 dBu	79.00 m	97.20 dBu

Figure 6 Map of Primary, Licensed, and Proposed 60 dBu