

Exhibit 11 Page 1
Centro Cristiano Oasis De Bendicion, Inc.
Second-Adjacent Waiver Request
Augusta, GA

The proposed LPFM station will broadcast on channel 247, which is within the 40 kilometers second-adjacent minimum distance separation of station WTHB-FM on channel 245. The WTHB-FM interfering contour at the LPFM tower site is 61.4 dBμ F(50,50). Using the ratio of 100:1 (LPFM to WTHB-FM) on the second-adjacent channel, the population within the proposed LPFM 101.4 dBμ contour is zero. Applying the antenna manufacturer's vertical radiation pattern the area of interference can be more accurately calculated geometrically, rather than just by using the free space equation alone. This particular antenna is a three bay 3/4 wave spaced Nicom BKG77 antenna. It was determined from the manufacturer's vertical plan that from 60 to 70 degrees below horizontal the interference area would reach the ground and extend 30.0 meters horizontally. We have proposed the antenna radiation center will be 47 meters above ground with an Effective Radiated Power of 17 watts. There are no occupied structures or roadways within the interference area of the translator. Therefore, the application is in compliance with §73.807(e)(1) *Waiver of the second-adjacent channel separations.*

Exhibit 11 Figure 1

Minimum Ground Clearance

Depression Angle Below Horizontal	Antenna Relative Field	ERP (Watts)	Distance to interfering Contour from Antenna (m)	Horizontal Distance of Interfering contour from tower (m)	Vertical Clearance of Interfering contour above TGL (m)
5	0.913	14.2	225	224.1	27.4
10	0.678	7.8	167	164.5	18.0
15	0.357	2.2	89	86.0	24.0
20	0.049	0.0	0	0.0	47.0
25	0.171	0.5	42	38.1	29.3
30	0.270	1.2	65	56.3	14.5
35	0.250	1.1	63	51.6	10.9
40	0.148	0.4	38	29.1	22.6
45	0.015	0.0	0	0.0	47.0
50	0.107	0.2	27	17.4	26.3
55	0.194	0.6	46	26.4	9.3
60	0.238	1.0	60	30.0	-5.0
65	0.244	1.0	60	25.4	-7.4
70	0.220	0.8	53	18.1	-2.8
75	0.185	0.6	46	11.9	2.6
80	0.145	0.4	38	6.6	9.6
85	0.119	0.2	27	2.4	20.1
90	0.114	0.2	27	0.0	20.0
Minimum Clearance above TGL:					-7.4

Antenna Height Above Average Terrain Calculations -- Results

Input Data

Latitude **33° 25' 16"** North
Longitude **82° 4' 15"** West (NAD 27)

These coordinates convert to NAD 83 coordinates of
33° 25' 16.50", North, 82° 04' 14.43" West (NAD 83).

Height of antenna radiation center above mean sea level: **165** meters AMSL

Number of Evenly Spaced Radials = **8** 0° is referenced to True North

Results

Calculated HAAT = **71 meters**

Antenna Height Above Average Terrain calculated
using 1 km [GLOBE terrain data](#)

Individual "Radial HAAT" Values, in meters

0°	69.4 m
45°	74.3 m
90°	119.0 m
135°	101.2 m
180°	68.9 m
225°	56.3 m
270°	32.3 m
315°	44.8 m

Print Results?

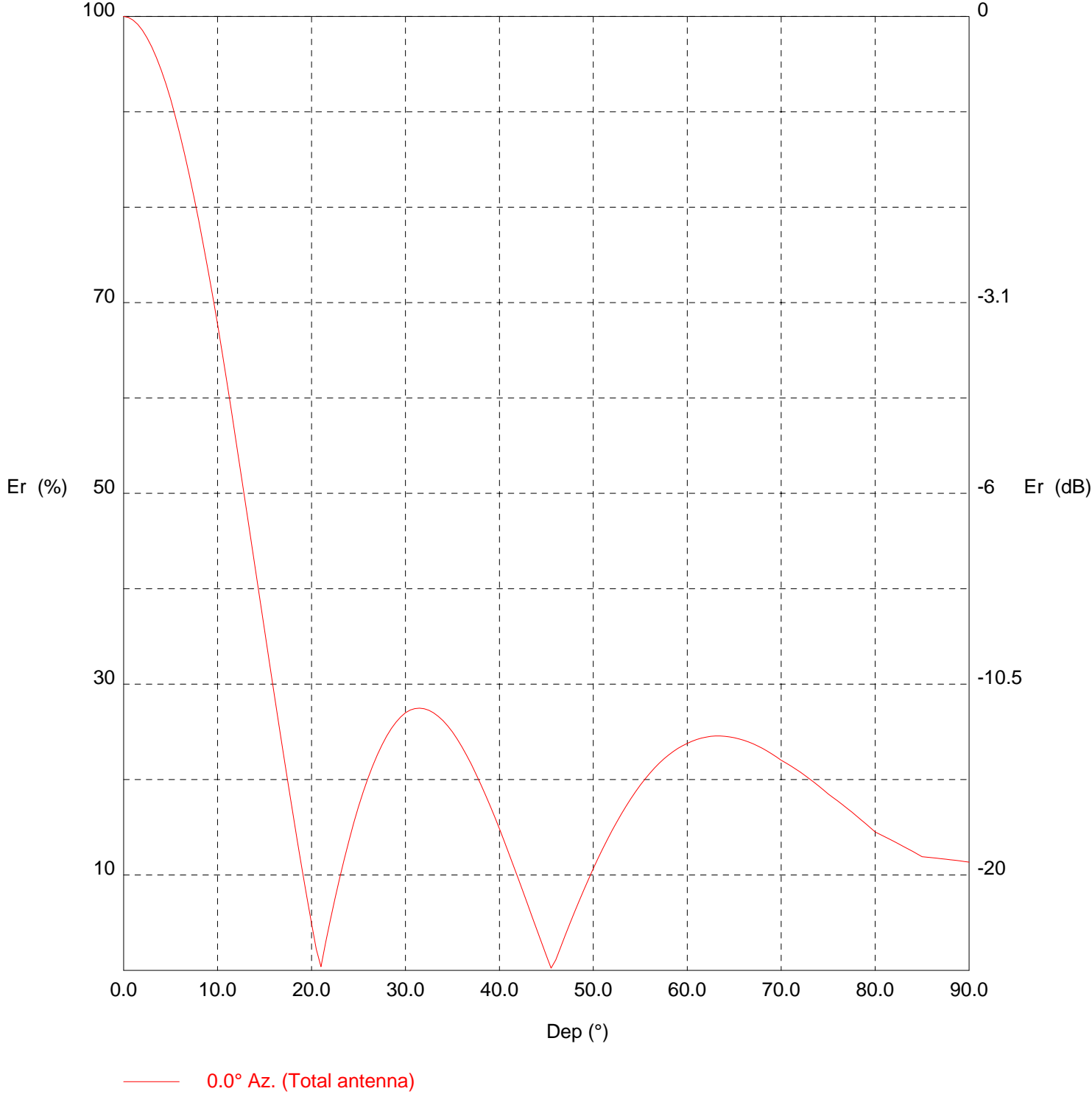
New Calculation?

TX station: BKG77/3 GENERIC

Site name:

Frequency: 100.00 MHz

Vertical diagram



TX station: BKG77/3 GENERIC

Site name:

Frequency: 100.00 MHz

Vertical diagram at an azimuth of 0° degrees

Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)
0.0	100.0	1.37	30.0	27.0	0.10	60.0	23.8	0.08
0.5	99.9	1.37	30.5	27.3	0.10	60.5	24.0	0.08
1.0	99.6	1.36	31.0	27.4	0.10	61.0	24.2	0.08
1.5	99.2	1.35	31.5	27.5	0.10	61.5	24.3	0.08
2.0	98.5	1.33	32.0	27.4	0.10	62.0	24.5	0.08
2.5	97.8	1.31	32.5	27.3	0.10	62.5	24.5	0.08
3.0	96.8	1.28	33.0	27.0	0.10	63.0	24.6	0.08
3.5	95.7	1.26	33.5	26.6	0.10	63.5	24.6	0.08
4.0	94.4	1.22	34.0	26.2	0.09	64.0	24.5	0.08
4.5	92.9	1.18	34.5	25.6	0.09	64.5	24.5	0.08
5.0	91.3	1.14	35.0	25.0	0.09	65.0	24.4	0.08
5.5	89.5	1.10	35.5	24.2	0.08	65.5	24.3	0.08
6.0	87.6	1.05	36.0	23.4	0.08	66.0	24.1	0.08
6.5	85.5	1.00	36.5	22.5	0.07	66.5	23.9	0.08
7.0	83.3	0.95	37.0	21.6	0.06	67.0	23.7	0.08
7.5	81.0	0.90	37.5	20.6	0.06	67.5	23.5	0.08
8.0	78.6	0.85	38.0	19.5	0.05	68.0	23.3	0.07
8.5	76.0	0.79	38.5	18.4	0.05	68.5	23.0	0.07
9.0	73.4	0.74	39.0	17.3	0.04	69.0	22.7	0.07
9.5	70.6	0.68	39.5	16.1	0.04	69.5	22.4	0.07
10.0	67.8	0.63	40.0	14.8	0.03	70.0	22.0	0.07
10.5	64.7	0.57	40.5	13.6	0.03	70.5	21.7	0.06
11.0	61.6	0.52	41.0	12.3	0.02	71.0	21.4	0.06
11.5	58.5	0.47	41.5	11.0	0.02	71.5	21.1	0.06
12.0	55.3	0.42	42.0	9.6	0.01	72.0	20.8	0.06
12.5	52.1	0.37	42.5	8.3	0.01	72.5	20.4	0.06
13.0	48.8	0.33	43.0	6.9	0.01	73.0	20.1	0.06
13.5	45.5	0.28	43.5	5.6	0.00	73.5	19.7	0.05
14.0	42.2	0.24	44.0	4.2	0.00	74.0	19.3	0.05
14.5	38.9	0.21	44.5	2.9	0.00	74.5	18.9	0.05
15.0	35.7	0.17	45.0	1.5	0.00	75.0	18.5	0.05
15.5	32.4	0.14	45.5	0.2	0.00	75.5	18.1	0.05
16.0	29.1	0.12	46.0	1.1	0.00	76.0	17.8	0.04
16.5	25.9	0.09	46.5	2.4	0.00	76.5	17.4	0.04
17.0	22.7	0.07	47.0	3.6	0.00	77.0	17.0	0.04
17.5	19.6	0.05	47.5	4.9	0.00	77.5	16.6	0.04
18.0	16.5	0.04	48.0	6.1	0.01	78.0	16.2	0.04
18.5	13.5	0.02	48.5	7.3	0.01	78.5	15.8	0.03
19.0	10.5	0.02	49.0	8.5	0.01	79.0	15.4	0.03
19.5	7.7	0.01	49.5	9.6	0.01	79.5	14.9	0.03
20.0	4.9	0.00	50.0	10.7	0.02	80.0	14.5	0.03
20.5	2.2	0.00	50.5	11.7	0.02	80.5	14.3	0.03
21.0	0.4	0.00	51.0	12.7	0.02	81.0	14.0	0.03
21.5	2.9	0.00	51.5	13.7	0.03	81.5	13.8	0.03
22.0	5.3	0.00	52.0	14.7	0.03	82.0	13.5	0.03
22.5	7.5	0.01	52.5	15.6	0.03	82.5	13.3	0.02
23.0	9.7	0.01	53.0	16.4	0.04	83.0	13.0	0.02
23.5	11.7	0.02	53.5	17.2	0.04	83.5	12.7	0.02
24.0	13.7	0.03	54.0	18.0	0.04	84.0	12.5	0.02
24.5	15.5	0.03	54.5	18.7	0.05	84.5	12.2	0.02
25.0	17.1	0.04	55.0	19.4	0.05	85.0	11.9	0.02
25.5	18.7	0.05	55.5	20.1	0.06	85.5	11.9	0.02
26.0	20.1	0.06	56.0	20.7	0.06	86.0	11.8	0.02
26.5	21.4	0.06	56.5	21.2	0.06	86.5	11.8	0.02
27.0	22.6	0.07	57.0	21.7	0.06	87.0	11.7	0.02
27.5	23.6	0.08	57.5	22.2	0.07	87.5	11.6	0.02
28.0	24.5	0.08	58.0	22.6	0.07	88.0	11.6	0.02
28.5	25.3	0.09	58.5	22.9	0.07	88.5	11.5	0.02
29.0	26.0	0.09	59.0	23.3	0.07	89.0	11.5	0.02
29.5	26.6	0.10	59.5	23.5	0.08	89.5	11.4	0.02

Exhibit 11 Figure 4
Aerial Photo of the 30.0 meter Vicinity Surrounding the Proposed Tower Site

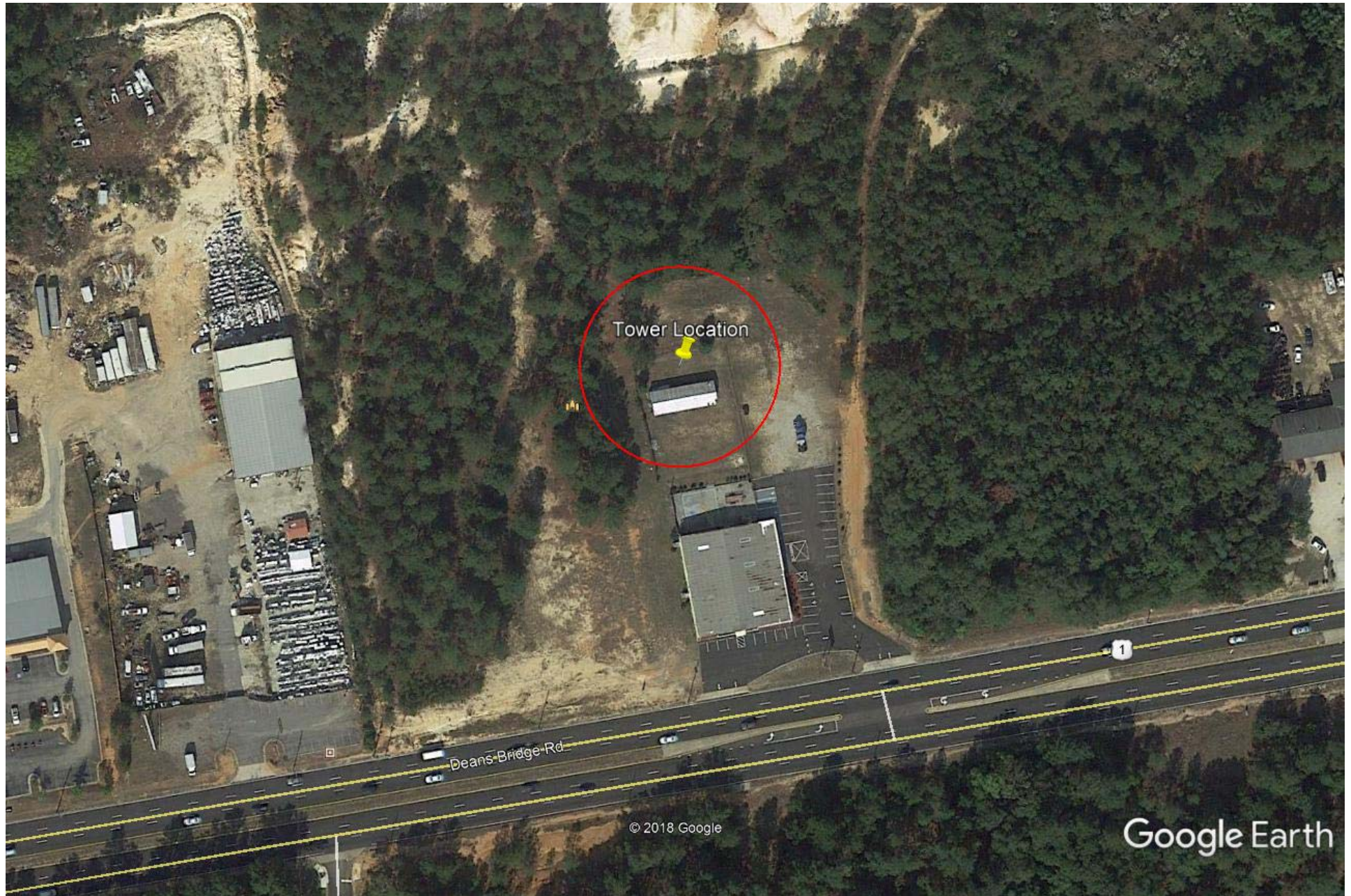


Exhibit 11 Figure 5
Topographic Map of the 30.0 meter Vicinity Surrounding the Proposed Tower Site

