



REC Networks
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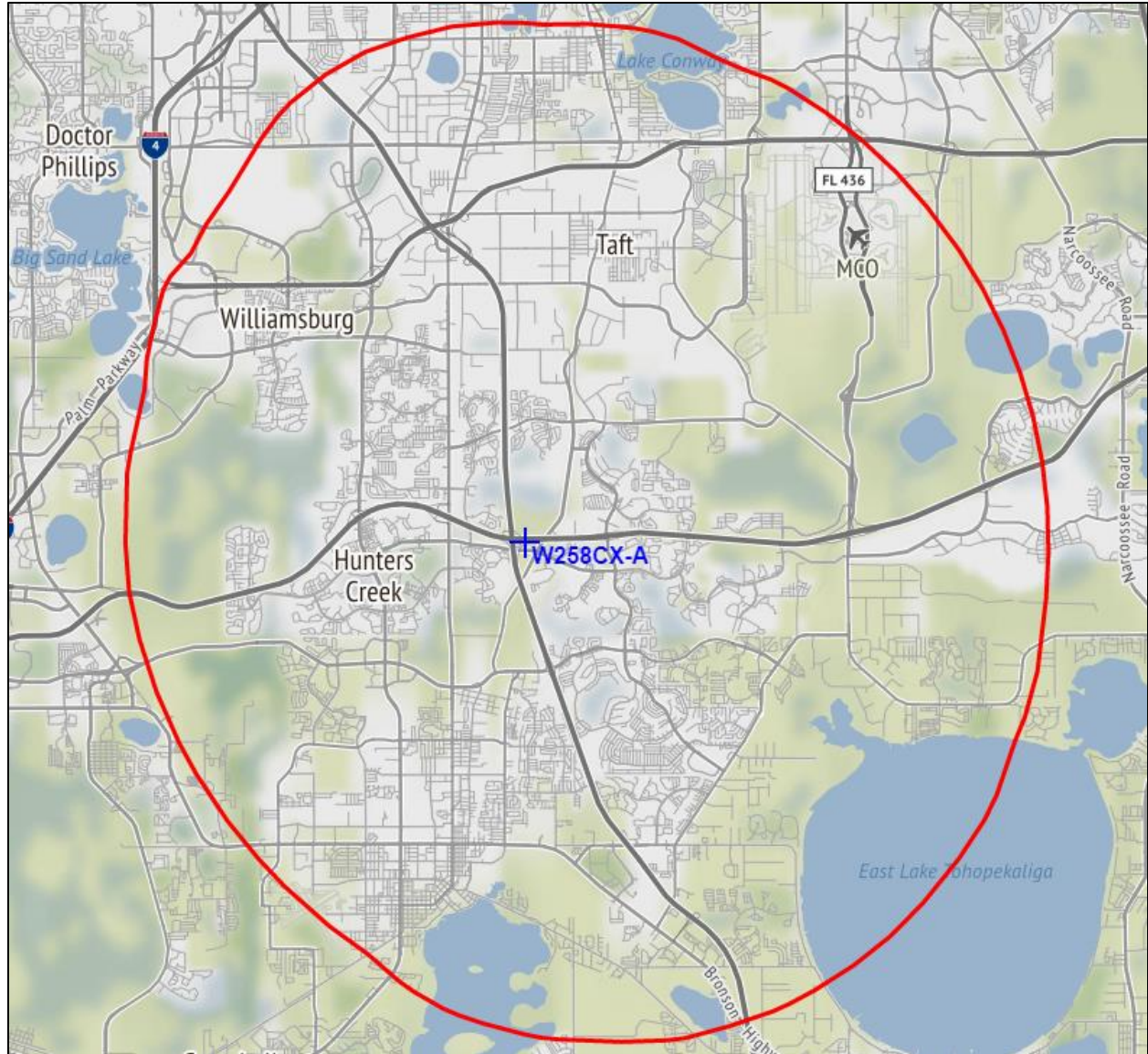
Minor CP Modification for **W258CX**

ORLANDO, FL

FLORIDA BROADCASTERS PARTNERSHIP

BPFT-20170718ADH

PROPOSED 60dBu F(50,50) SERVICE CONTOUR



ORLANDO, FL – Channel 279D ~ 103.7 MHz ~ ERP 0.194 kW

Elev: 27 meters ~ RCAGL: 97 meters ~ RCAMSL: 124 meters ~ HAAT: 103 meters

Overall tower height: 140.2 meters – ASR: 1041410

NAD83 Latitude: 28° 22' 02.1" NL – Longitude: 81° 23' 12.1" WL

NAD27 Latitude: 28° 22' 01.1" NL – Longitude: 81° 23' 12.8" WL

The map displays the Orlando, Florida area with various radio station coverage contours. Key features include:

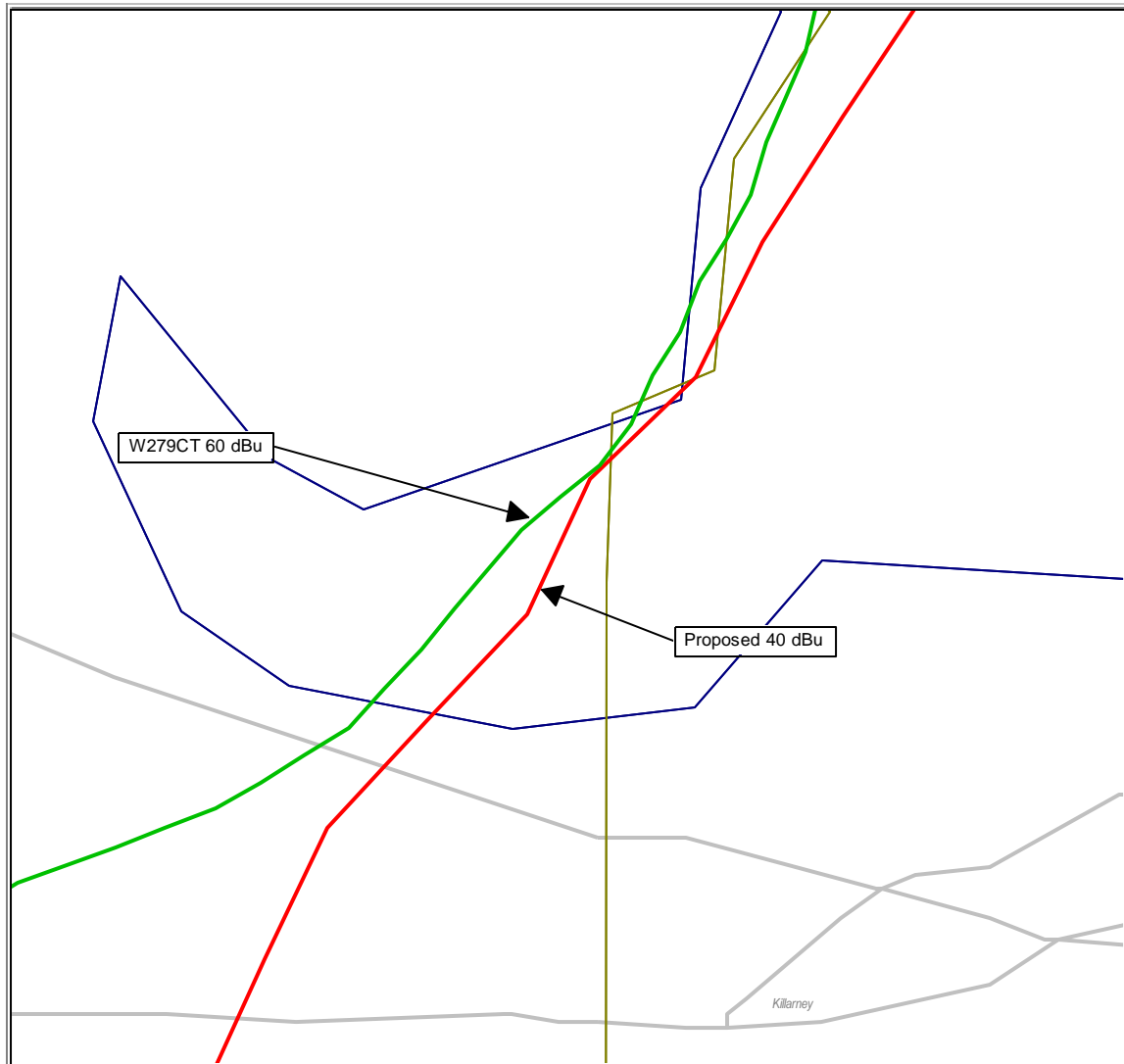
- W279CT** (Call sign: +W279CT) with a **Proposed 40 dBu** contour.
- W279CO** (Call sign: +W279CO) with a **Proposed 54 dBu** contour.
- W258CX** (Call sign: +W258CX) with a **Proposed 60 dBu** contour.
- W226BT** (Call sign: +W226BT) with a **Proposed 60 dBu** contour.
- W258CX(CP)** (Call sign: +W258CX(CP)) with a **Proposed 60 dBu** contour.
- W258CX(A)** (Call sign: +W258CX(A)) with a **Proposed 60 dBu** contour.
- WTKS** (Call sign: +WTKS) with a **82.1 dBu** contour.
- WOTW** (Call sign: +WOTW) with a **71.1** dBu contour.

The map also shows existing coverage contours for W279CT (60 dBu) and W279CO (60 dBu). The map includes various geographical features and city names, such as Orlando, Winter Park, and Lake City.

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w279CO contour based on BMPFT-20170718ADE Granted 08/01/2017

W258CX(A) Interference Protections



W258CX(A) vs. W279CT (contour comes close but not overlap - over water)

W258CX(A) Interference Protections



W258CX(A) vs. W279CO

W279CO EXISTING LICENSED FACILITY

W258CX(A)
Orlando, Florida
Channel 279D (103.7 MHz)

The instant application has a co-channel overlap with the existing licensed facility for W279CO (BLFT-20141009ADC).

This translator is being to the east and changed to Channel 278D on BMPFT-20170718ADE, which was granted as part of a three-way contingency agreement on August 1, 2017.

The instant application moves the post-change location of the proposed W258CX site further away from the existing licensed facility for BLFT-20141009ADC.

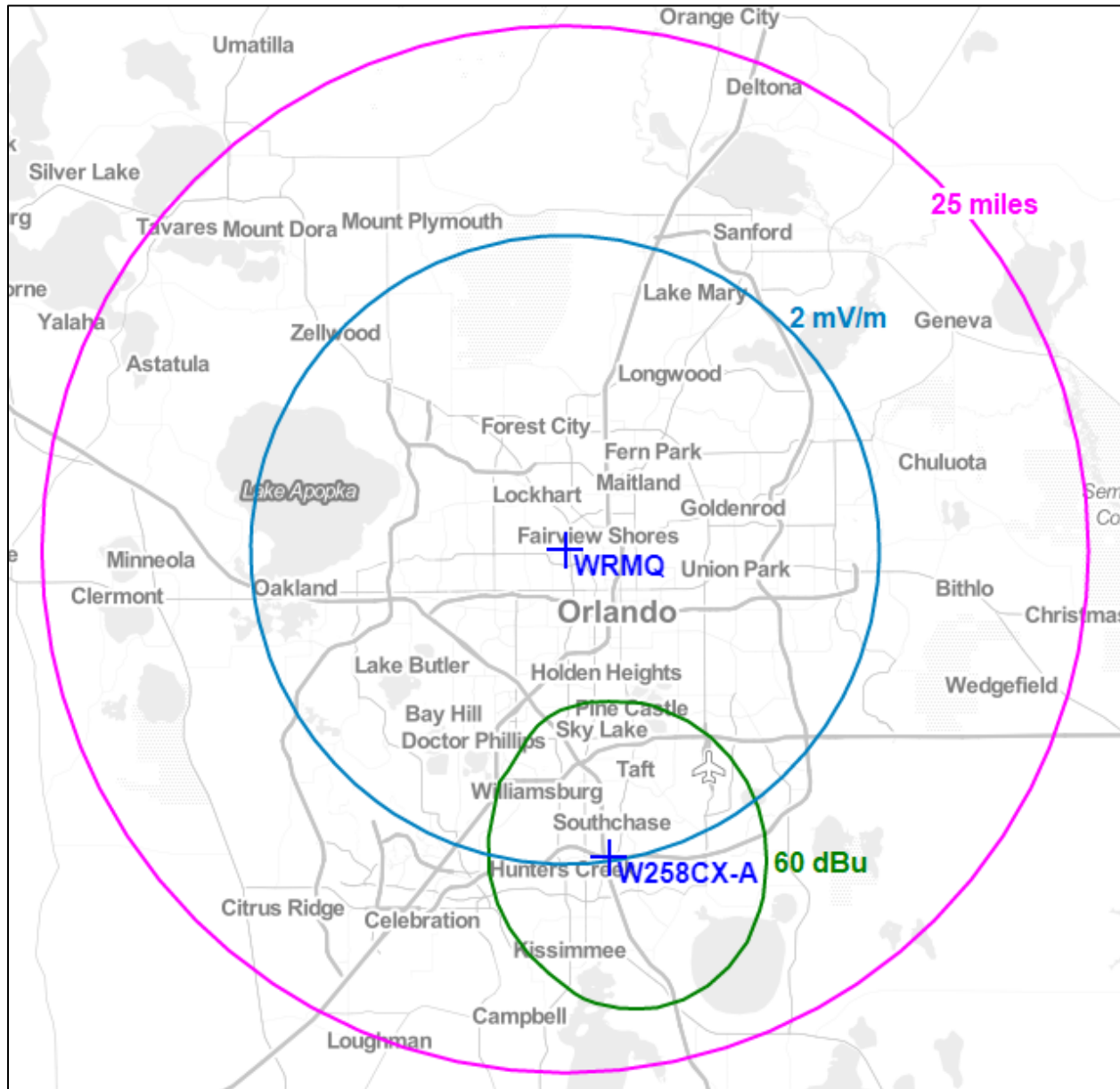
As per the facilities granted in the original contingency agreement, the instant application cannot engage in operations at the new (or the currently authorized) site until the site specified in BMPFT-20170718ADE is constructed and that the facility specified in BLFT-20141009ADC discontinues operation.

The instant application will not impact the overall three-way contingency agreement.

Site: W258CX(A)
 Coordinates: 28-22-01.1 N, 81-23-12.8 W
 Freq: 103.70000 MHz
 ERP: 194.00 W

Bearing	ERP W	HAAT	DH	Distance	Lat	Lon
0	185.94	98	20	11.86	28.473664	-81.386889
5	189.76	98	10	11.92	28.473759	-81.376261
10	192.84	98	30	11.96	28.472927	-81.365635
15	194.00	99	30	12.04	28.471563	-81.355007
20	192.06	99	30	12.01	28.468466	-81.344864
25	189.76	99	30	11.97	28.464579	-81.335110
30	189.37	100	10	12.03	28.460657	-81.325355
35	189.37	101	10	12.09	28.456023	-81.315951
40	189.37	101	20	12.09	28.450244	-81.307396
45	188.22	102	20	12.13	28.444072	-81.299172
50	187.46	102	20	12.12	28.436982	-81.291961
55	187.46	102	20	12.12	28.429436	-81.285387
60	187.46	103	20	12.17	28.421670	-81.279082
65	187.46	105	20	12.29	28.413627	-81.273020
70	187.46	105	20	12.29	28.404716	-81.268835
75	187.46	105	20	12.29	28.395519	-81.265550
80	187.46	105	20	12.29	28.386105	-81.263189
85	187.46	105	10	12.29	28.376546	-81.261770
90	187.46	105	10	12.29	28.366915	-81.261303
95	187.46	105	10	12.29	28.357284	-81.261793
100	188.61	105	10	12.30	28.347699	-81.263053
105	189.37	106	10	12.37	28.338114	-81.264757
110	189.37	106	10	12.37	28.328858	-81.268084
115	189.37	106	10	12.37	28.319892	-81.272315
120	190.14	107	10	12.44	28.310969	-81.276797
125	192.45	107	10	12.48	28.302548	-81.282454
130	194.00	106	10	12.45	28.294975	-81.289490
135	192.06	106	10	12.42	28.287977	-81.297214
140	190.52	106	10	12.39	28.281566	-81.305533
145	188.61	106	10	12.36	28.275880	-81.314478
150	182.91	107	10	12.32	28.270953	-81.323954
155	175.45	107	10	12.20	28.267519	-81.334239
160	168.15	108	10	12.13	28.264468	-81.344533
165	160.30	108	10	11.98	28.262861	-81.355218
170	149.21	107	10	11.73	28.263033	-81.366081
175	137.54	108	10	11.56	28.263392	-81.376600
180	127.28	109	0	11.40	28.264472	-81.386889
185	115.62	109	10	11.13	28.267245	-81.396795
190	106.52	109	20	10.91	28.270315	-81.406240
195	98.07	108	20	10.66	28.274382	-81.415059
200	91.03	105	10	10.33	28.279692	-81.422960
205	85.02	104	20	10.11	28.284592	-81.430508
210	78.97	104	20	9.92	28.289661	-81.437573
215	73.85	104	30	9.77	28.294999	-81.444114
220	69.84	104	20	9.64	28.300564	-81.450162
225	66.39	104	20	9.52	28.306427	-81.455638
230	63.92	104	20	9.43	28.312444	-81.460676
235	62.15	104	20	9.36	28.318651	-81.465243
240	60.84	104	30	9.31	28.325069	-81.469290
245	59.76	104	20	9.27	28.331708	-81.472739
250	59.33	104	20	9.25	28.338479	-81.475744
255	59.33	103	20	9.21	28.345504	-81.477796
260	59.97	102	20	9.19	28.352587	-81.479388
265	61.06	101	20	9.19	28.359738	-81.480433
270	62.37	100	20	9.19	28.366940	-81.480828
275	64.81	99	20	9.23	28.374176	-81.480894
280	67.30	98	20	9.27	28.381419	-81.480218
285	70.54	97	20	9.33	28.388665	-81.479048
290	74.57	97	20	9.46	28.396053	-81.477810
295	80.21	98	20	9.68	28.403754	-81.476634
300	87.09	99	20	9.93	28.411588	-81.474803
305	93.98	100	20	10.17	28.419397	-81.472062
310	101.97	98	20	10.27	28.426319	-81.467344
315	110.00	97	20	10.41	28.433159	-81.462179
320	122.30	96	20	10.63	28.440176	-81.456762
325	135.91	98	20	11.00	28.447995	-81.451425
330	149.89	100	20	11.38	28.455619	-81.445110
335	164.92	100	20	11.64	28.461890	-81.437240
340	173.98	99	20	11.74	28.466159	-81.427957
345	178.42	99	30	11.80	28.469530	-81.418151
350	182.16	99	30	11.86	28.472042	-81.407965
355	183.67	99	20	11.88	28.473464	-81.397488

CROSS-SERVICE FILL-IN COVERAGE



WAIVER OF §74.1204(a) REQUEST
SHORT-SPACED SECOND AND THIRD ADJACENT CHANNELS

W258CX(A)
Orlando, Florida
Channel 279D (103.7 MHz)

The proposed facility (“W258CX(A)”) is located within the 60 dBu protected service contours of second-adjacent channel facilities WOTW, Windermere, Florida and WTKS-FM, Cocoa Beach, Florida.

WOTW operates 22 kW into a directional antenna at 227 meters height above average terrain (HAAT) on Channel 276C2. WOTW places a 71.1 dBu service contour at W258CX(A).

WTKS-FM operates 94 kW into a non-directional antenna at 482 meters HAAT on Channel 281C. WTKS-FM places an 82.1 dBu service contour at W258CX(A).

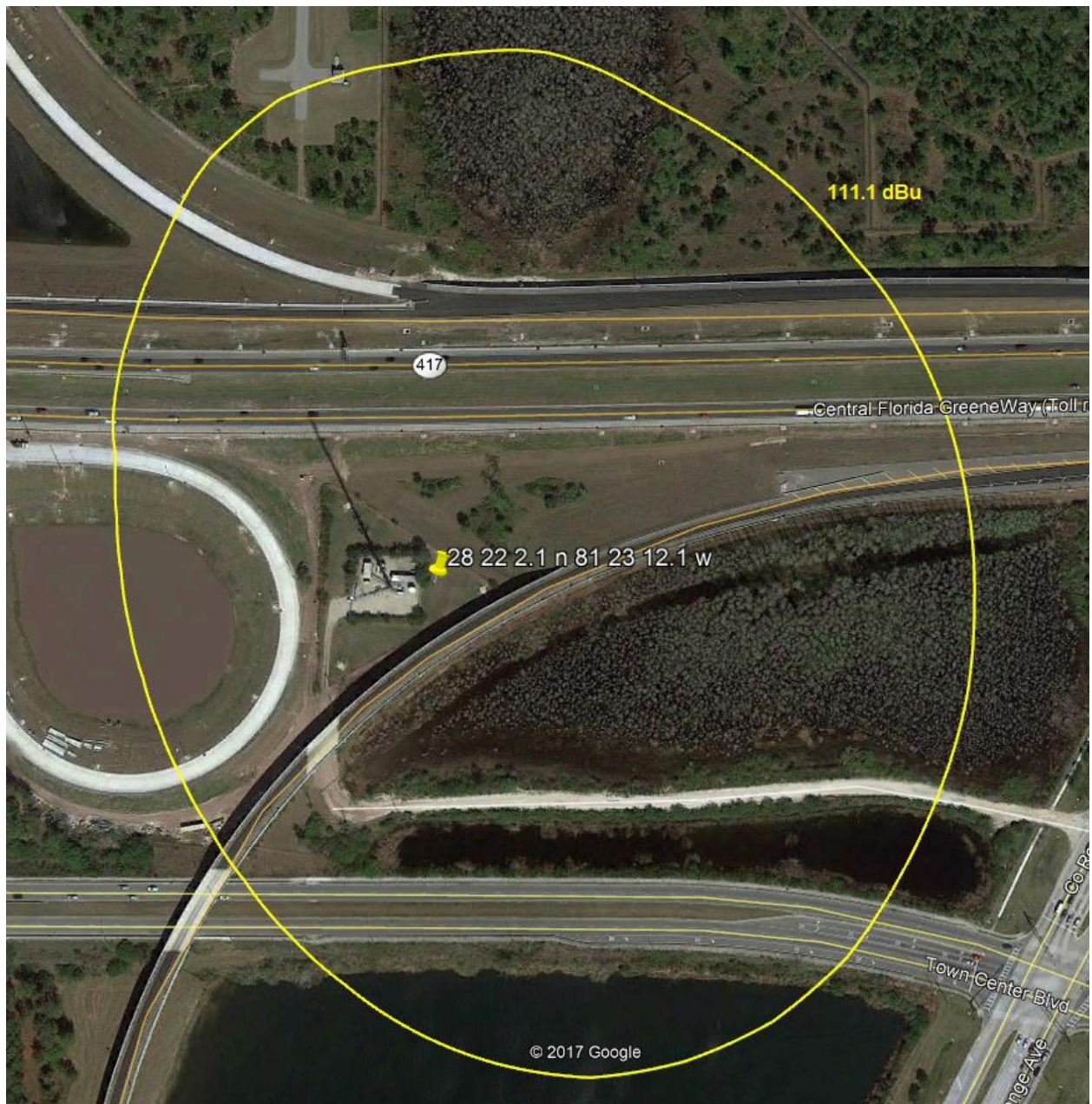
When evaluating multiple overlapping stations, we further review the weaker of the two stations as the interfering contour of the stronger station would be fully contained in the weaker station. In this case, we will further evaluate WOTW.

Using the U/D method¹, the proposed translator station is predicted to produce an undesired interference overlap in respect to WOTW to the proposed translator station’s 111.1 dBu interference contour (“overlap zone”). At 194 watts ERP, the overlap zone extends to 272 meters from the radiation center. As the proposed radiation center is 97 meters above ground level, the interference will reach the ground. In addition, the tower is adjacent to a 2-lane signed state highway that would be subject to protection for potential listeners. Along the highway within the overlap zone, we were able to identify locations that are at elevations up to 11 meters higher than the base of the tower due to terrain and highway infrastructure. To address the interference, W258CX(A) is proposing to operate a 2-bay Nicom BKG-77 circularly polarized antenna at half-wave spacing. Based on manufacturer’s specifications, at 13 meters above ground level, the interfering contour along the -25 degree depression angle will not exceed 110.56 dBu. This artificial floor takes the highway into consideration.

Based on these findings, the proposed modified FM translator will not create any interference to listeners or potential listeners of WOTW or WTKS-FM. The applicant is requesting a waiver of §74.1204(a) in respect to second and third-adjacent channel short-spaced stations WOTW, Windermere, Florida and WTKS-FM, Cocoa Beach, Florida.

Prepared by
Michelle Bradley
REC Networks
August 20, 2017

¹ - See *Living Way Ministries, Inc.* Memorandum Opinion and Order, 17 FCC Rcd 17054, 17056 (2002) at 5. *Recon denied* 23 FCC Rcd 15070 (2008).



Proposed Power:				0.194 kW				
Antenna Height AGL:				97 m				
Interference Contour:				111.1 dBu				
Artificial RX Antenna Height:				13 m				
Antenna Type:				Nicom BKG77/BKG88 - 2 bay Half-wave spacing				
Angle Below Horizon	Antenna Relative Field	ERP in kW	ERP in dBk	Distance from Ant to Interference 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
5	0.988	0.189	-7.23	268.94	963.79	100.01	1112.95	98.76
10	0.952	0.176	-7.55	259.14	483.74	105.68	558.60	104.43
15	0.881	0.151	-8.22	239.82	324.55	108.47	374.78	107.22
20	0.791	0.121	-9.16	215.32	245.60	109.96	283.61	108.71
25	0.686	0.091	-10.40	186.73	198.76	110.56	229.52	109.31
30	0.577	0.065	-11.90	157.06	168.00	110.52	194.00	109.27
35	0.463	0.042	-13.81	126.03	146.45	109.80	169.11	108.55
40	0.354	0.024	-16.14	96.36	130.68	108.45	150.91	107.20
45	0.256	0.013	-18.96	69.69	118.79	106.47	137.18	105.22
50	0.174	0.006	-22.31	47.36	109.65	103.81	126.62	102.56
55	0.110	0.002	-26.29	29.94	102.55	100.41	118.42	99.16
60	0.061	0.001	-31.42	16.60	96.99	95.77	112.01	94.52
65	0.028	0.000	-38.18	7.62	92.68	89.40	107.03	88.15
70	0.007	0.000	-50.22	1.91	89.39	77.67	103.23	76.42
75	0.004	0.000	-55.08	1.09	86.96	73.05	100.42	71.80
80	0.008	0.000	-49.06	2.18	85.30	79.24	98.50	77.99
85	0.008	0.000	-49.06	2.18	84.32	79.34	97.37	78.09
90	0.009	0.000	-48.04	2.45	84.00	80.40	97.00	79.15