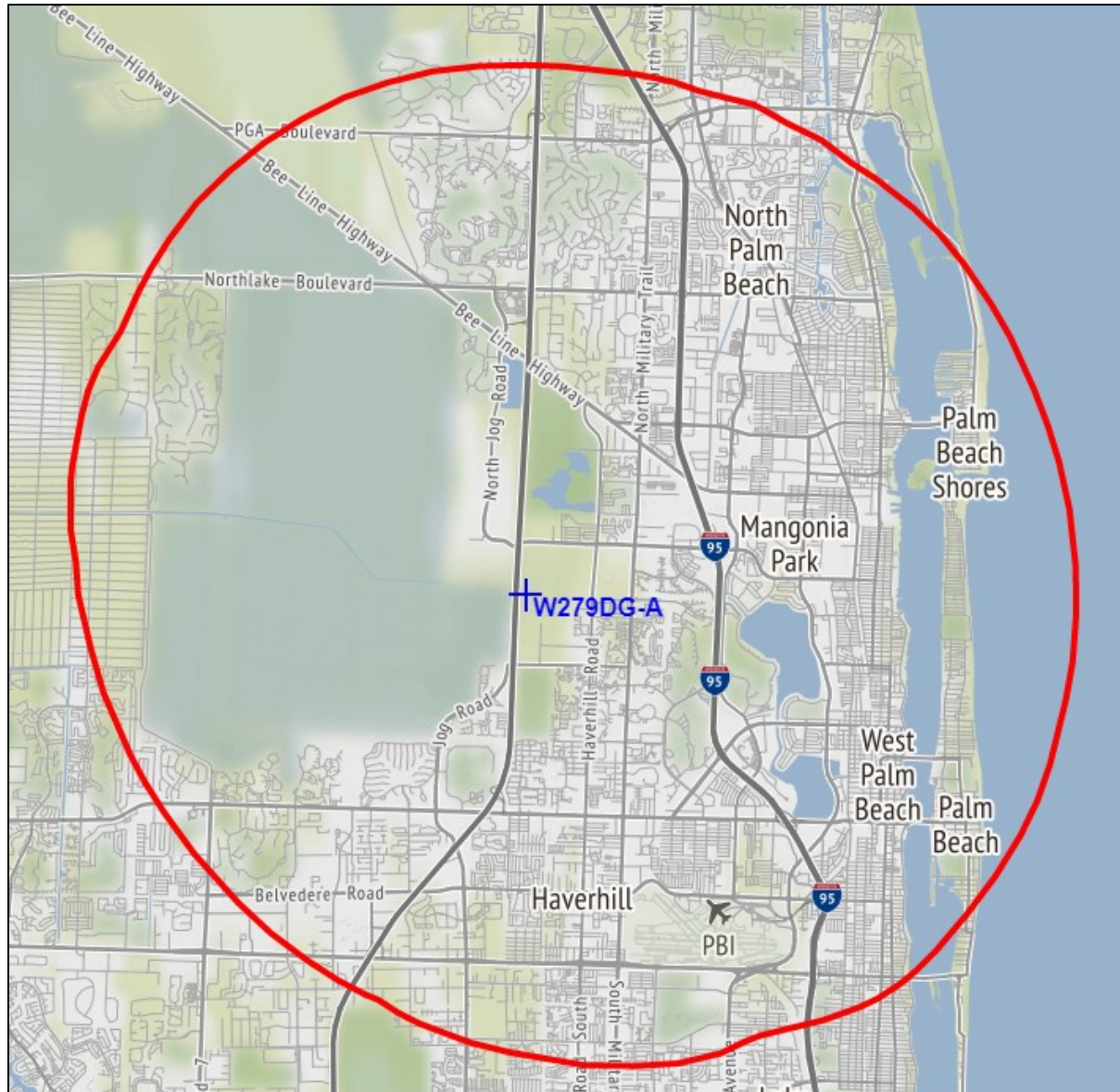




REC Networks
11541 Riverton Wharf Rd.
Mardela Springs, MD 21837
844.REC.LPFM/202.621.2355
recnet.com

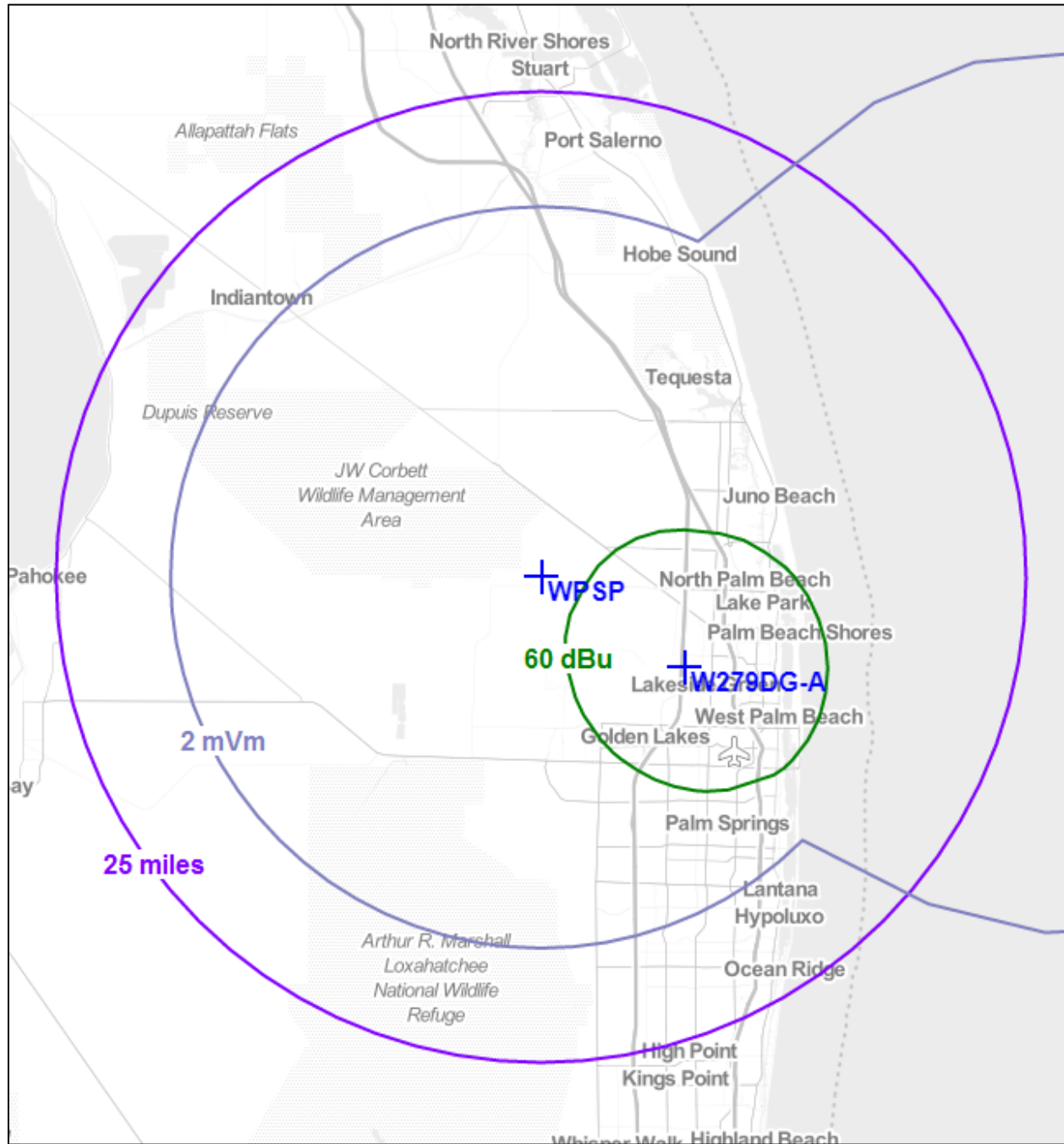
Minor modification for **W279DG**
WEST PALM BEACH, FL
NATIONAL CHRISTIAN NETWORK
BLFT-20161227AAB

PROPOSED 60dBu F(50,50) SERVICE CONTOUR



WEST PALM BEACH, FL – Channel 281D (104.1 MHz) ~ ERP 0.250 kW ~ Directional
Elev: 8 meters ~ RCAGL: 81 meters ~ RCAMSL: 89 meters
Overall tower height: 86 meters – ASR: 1052243 ~ HAAT: 85 meters
NAD83 Latitude: 26° 45' 00.0" NL – Longitude: 80° 07' 56.0" WL
NAD27 Latitude: 26° 44' 58.8" NL – Longitude: 80° 07' 56.8" WL
Mounted on WPOM(AM) – Tower #3

FILL-IN AREA



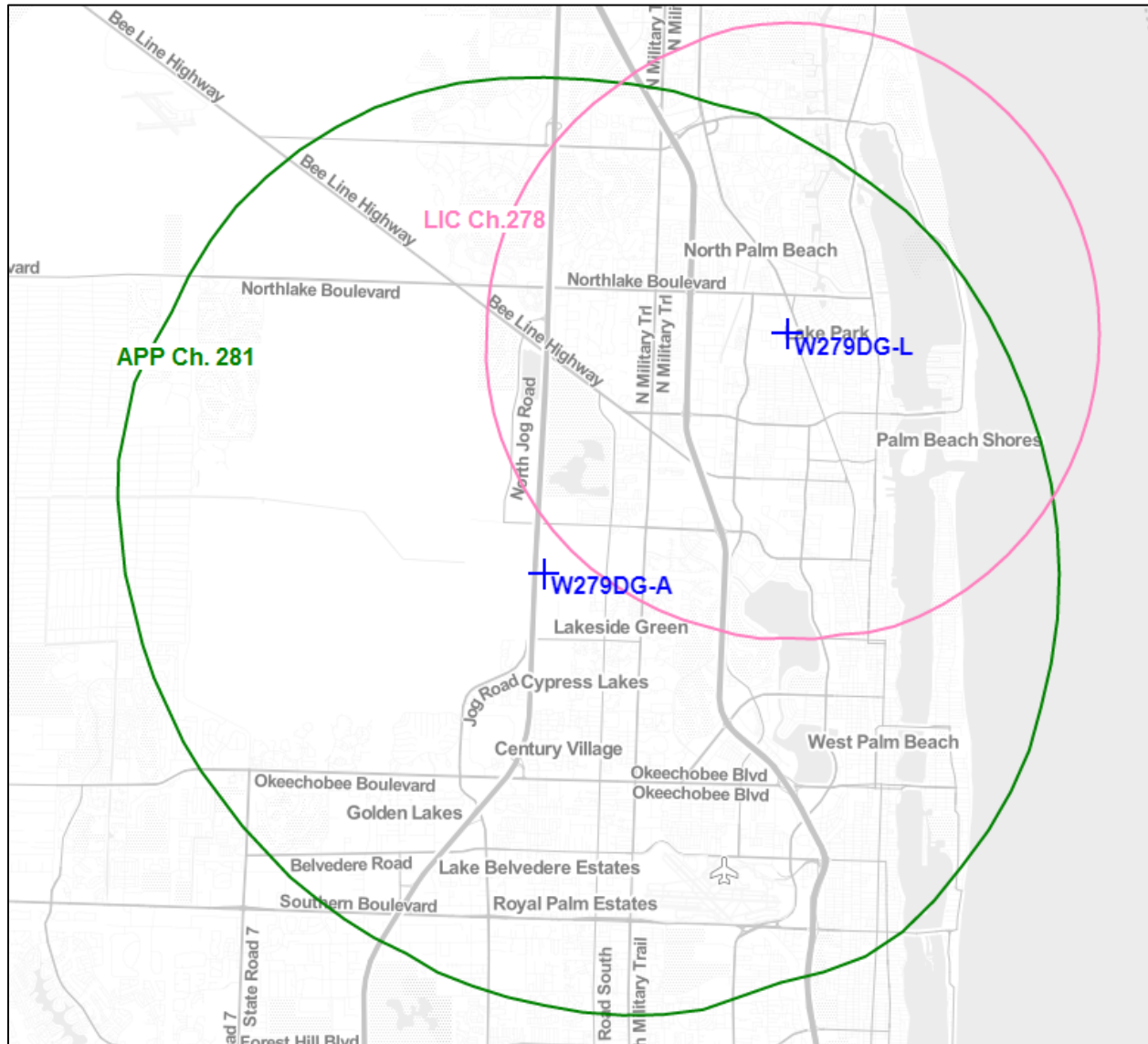
The 60 dBu protected service contour of the proposed translator is fully within the 2 mV/m daytime contour of the primary AM station.

R E C NETWORKS
CHANNEL REPORT

NAD27 LATITUDE: 26 - 44' 58.8" - LONGITUDE: 80 - 07' 56.8"
CHANNEL: 281 - CLASS: D

CHAN	FREQ	CALL	LOCATION	CLS	DIST	INTF	SERV	CLEAR	BEAR
228	93.5	WBGF	BELLE GLADE	FL C3	59.7	IF	12.0	47.7	263.0
		: JVC MEDIA OF SOUTH FLA, LLC							
228	93.5	WBGF	BELLE GLADE	FL C3	51.8	IF	12.0	39.8	260.0
		: JVC MEDIA OF SOUTH FLA, LLC							
278	103.5	WMIB	FORT LAUDERDALE	FL C	87.0	0.6	72.5	13.9	185.0
		: CLEAR CHANNEL BROADCASTING LICENSES, INC.							
279	103.7	W279DG	WEST PALM BEACH	FL D	7.9	1.1	7.1	-0.3	45.0
		: NATIONAL CHRISTIAN NETWORK							
		: Currently authorized facility							
279	103.7	WQOL	VERO BEACH	FL C2	113.9	1.1	50.8	62.0	344.0
		: CAPSTAR TX, LLC							
280	103.9	WJUP-LP	JUPITER	FL L1	22.2	16.8	5.4	0.0	16.0
		: JUPITER COMMUNITY RADIO, INC.							
280	103.9	W280DU	BOCA RATON	FL D	42.3	12.9	15.9	13.5	185.0
		: BEASLEY MEDIA GROUP, LLC							
280	103.9	WXKB	CAPE CORAL	FL C	153.5	16.6	75.2	61.7	257.0
		: BEASLEY MEDIA GROUP, LLC							
280	103.9	WZPP-LP	HOLLYWOOD	FL L1	87.0	12.9	5.4	68.7	185.0
		: BROWARD JEWISH ALLIANCE, INC.							
281	104.1	WTKS-FM	COCOA BEACH	FL C	223.2	38.8	85.0	99.4	336.0
		: CLEAR CHANNEL BROADCASTING LICENSES, INC.							
282	104.3	WSFS	MIRAMAR	FL C1	84.8	12.9	70.6	1.3	184.0
		: ENTERCOM MIAMI LICENSE, LLC							
283	104.5	WFLM	WHITE CITY	FL C2	77.7	1.1	46.8	29.8	343.0
		: MIDWAY BROADCASTING COMPANY							
284	104.7	W284CS	MIAMI	FL D	87.0	0.6	6.2	80.2	186.0
		: CLEAR CHANNEL BROADCASTING LICENSES, INC.							
284	104.7	W284CR	WEST PALM BEACH	FL	9.7	0.7	6.7	2.3	219.0
		: EDUCATIONAL MEDIA FOUNDATION							
284	104.7	W284CR	WEST PALM BEACH	FL D	9.3	0.8	13.6	-5.1	121.0
		: EDUCATIONAL MEDIA FOUNDATION							
284	104.7	W284CR	WEST PALM BEACH	FL D	10.0	0.7	7.1	2.2	221.0
		: EDUCATIONAL MEDIA FOUNDATION							
284	104.7	WYUN-LP	COCONUT CREEK	FL L1	58.1	0.6	5.7	51.8	180.0
		: UNO MISION, INC.							

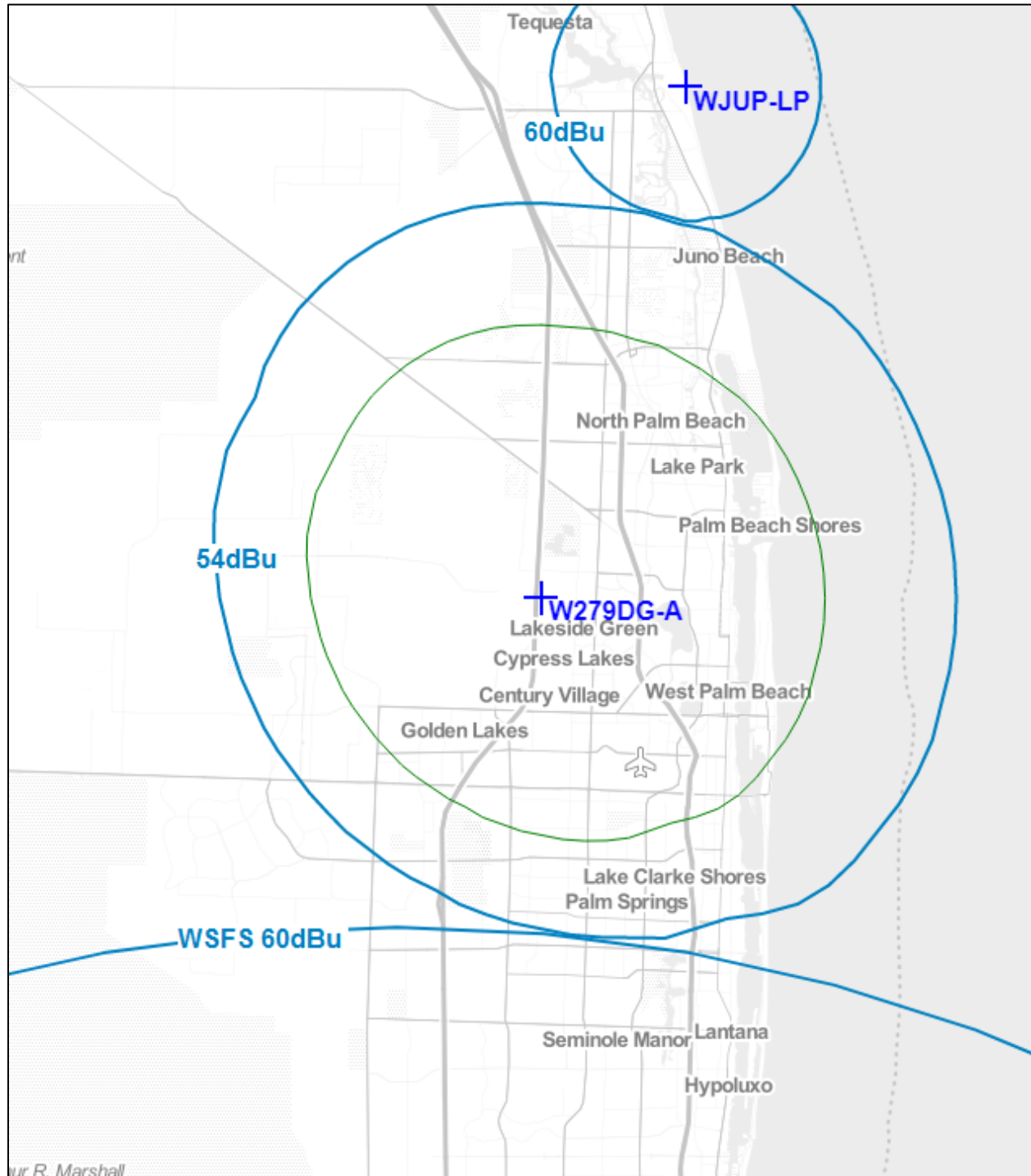
MINOR CHANGE



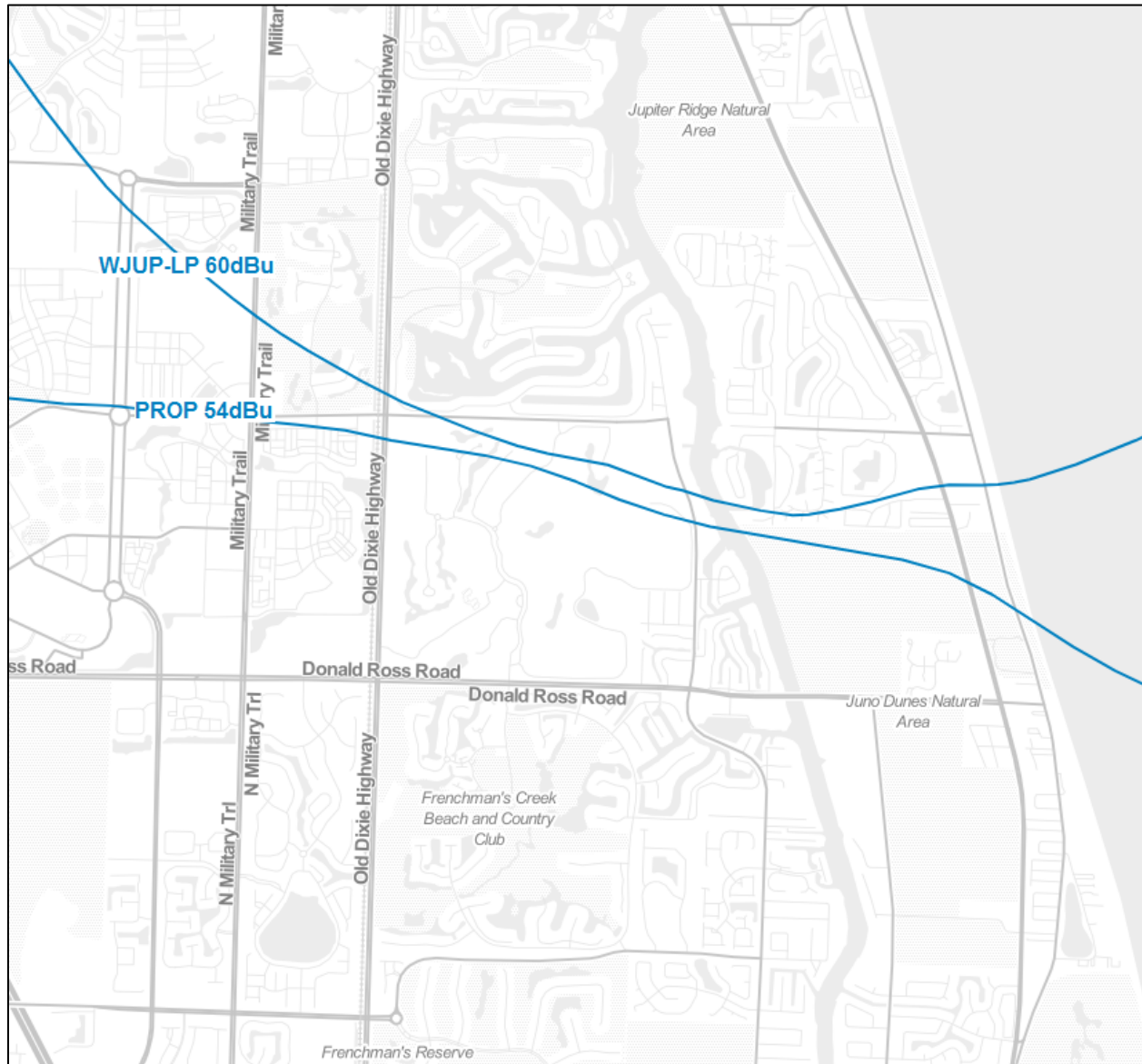
Azimuth	Field	ERP	HAAT	Contour	Latitude	Longitude
0	0.992	0.246	79.0	11.461	26.85307199	-80.13222222
5	0.990	0.245	79.1	11.457	26.85264089	-80.12215696
10	0.988	0.244	79.7	11.485	26.85171723	-80.11211892
15	0.988	0.244	80.5	11.538	26.85022820	-80.10212000
20	0.988	0.244	80.5	11.538	26.84750368	-80.09244417
25	0.986	0.243	83.1	11.697	26.84532815	-80.08239612
30	0.983	0.242	82.9	11.670	26.84087469	-80.07341281
35	0.983	0.242	83.5	11.709	26.83624105	-80.06453441
40	0.983	0.242	84.2	11.755	26.83095867	-80.05607492
45	0.983	0.242	85.5	11.839	26.82525788	-80.04786103
50	0.983	0.242	86.0	11.871	26.81859114	-80.04058706
55	0.983	0.242	85.9	11.864	26.81116533	-80.03429351
60	0.983	0.242	85.9	11.864	26.80331098	-80.02869701
65	0.983	0.242	85.7	11.851	26.79500243	-80.02400644
70	0.983	0.242	85.7	11.851	26.78640905	-80.02002869
75	0.986	0.243	85.9	11.878	26.77760145	-80.01664283
80	0.988	0.244	86.0	11.899	26.76853309	-80.01418954
85	0.988	0.244	86.0	11.899	26.75927647	-80.01283450
90	0.988	0.244	86.1	11.905	26.74994958	-80.01232383
95	0.990	0.245	86.0	11.910	26.74061453	-80.01273973
100	0.992	0.246	85.7	11.902	26.73136388	-80.01419441
105	0.996	0.248	85.2	11.893	26.72227149	-80.01656000
110	1.000	0.250	85.5	11.934	26.71324679	-80.01931564
115	0.996	0.248	85.5	11.909	26.70469540	-80.02356502
120	0.991	0.246	85.2	11.865	26.69661256	-80.02879153
125	0.977	0.239	85.3	11.792	26.68914289	-80.03499800
130	0.963	0.232	86.2	11.768	26.68194132	-80.04148514
135	0.943	0.222	87.2	11.715	26.67548132	-80.04885457
140	0.923	0.213	86.6	11.557	26.67036476	-80.05746264
145	0.893	0.199	84.6	11.251	26.66710282	-80.06727934
150	0.862	0.186	82.3	10.923	26.66492047	-80.07726250
155	0.830	0.172	83.4	10.790	26.66204510	-80.08633209
160	0.797	0.159	85.9	10.733	26.65929567	-80.09528334
165	0.764	0.146	86.7	10.561	26.65826075	-80.10471772
170	0.731	0.134	87.3	10.371	26.65814465	-80.11409939
175	0.704	0.124	87.4	10.185	26.65875251	-80.12328954

Azimuth	Field	ERP	HAAT	Contour	Latitude	Longitude
180	0.676	0.114	87.4	9.986	26.66019434	-80.13222222
185	0.652	0.106	87.8	9.833	26.66190878	-80.14084616
190	0.628	0.099	88.3	9.678	26.66428205	-80.14913509
195	0.611	0.093	88.3	9.546	26.66707822	-80.15708514
200	0.594	0.088	87.1	9.348	26.67100023	-80.16439800
205	0.583	0.085	87.9	9.299	26.67420445	-80.17177294
210	0.571	0.082	88.4	9.232	26.67809264	-80.17867924
215	0.565	0.080	88.4	9.178	26.68237759	-80.18520746
220	0.558	0.078	89.0	9.156	26.68691369	-80.19145770
225	0.556	0.077	88.4	9.103	26.69210044	-80.19701142
230	0.553	0.076	88.8	9.103	26.69736251	-80.20241572
235	0.556	0.077	88.5	9.108	26.70299894	-80.20732871
240	0.558	0.078	89.0	9.156	26.70880902	-80.21204532
245	0.565	0.080	89.0	9.210	26.71497166	-80.21625812
250	0.571	0.082	88.8	9.253	26.72151250	-80.21976665
255	0.583	0.085	88.7	9.341	26.72822850	-80.22307405
260	0.594	0.088	88.7	9.433	26.73523850	-80.22576500
265	0.611	0.093	88.1	9.535	26.74249459	-80.22787369
270	0.628	0.099	88.5	9.689	26.74996660	-80.22980215
275	0.652	0.106	87.2	9.800	26.75764733	-80.23054810
280	0.676	0.114	87.9	10.014	26.76560316	-80.23155086
285	0.704	0.124	87.4	10.185	26.77367228	-80.23132104
290	0.731	0.134	85.9	10.292	26.78162311	-80.22964835
295	0.764	0.146	84.8	10.450	26.78968491	-80.22763636
300	0.797	0.159	81.6	10.474	26.79706855	-80.22361260
305	0.830	0.172	79.0	10.518	26.80422844	-80.21903391
310	0.862	0.186	79.0	10.717	26.81192969	-80.21494962
315	0.893	0.199	79.0	10.898	26.81927773	-80.20987375
320	0.923	0.213	79.0	11.074	26.82627424	-80.20395948
325	0.943	0.222	79.0	11.189	26.83241465	-80.19690410
330	0.963	0.232	79.0	11.302	26.83801167	-80.18917715
335	0.977	0.239	79.0	11.379	26.84273998	-80.18069432
340	0.991	0.246	79.0	11.456	26.84680403	-80.17171458
345	0.996	0.248	79.0	11.480	26.84972093	-80.16217195
350	1.000	0.250	79.0	11.504	26.85188727	-80.15235916
355	0.996	0.248	79.0	11.483	26.85287292	-80.14231026

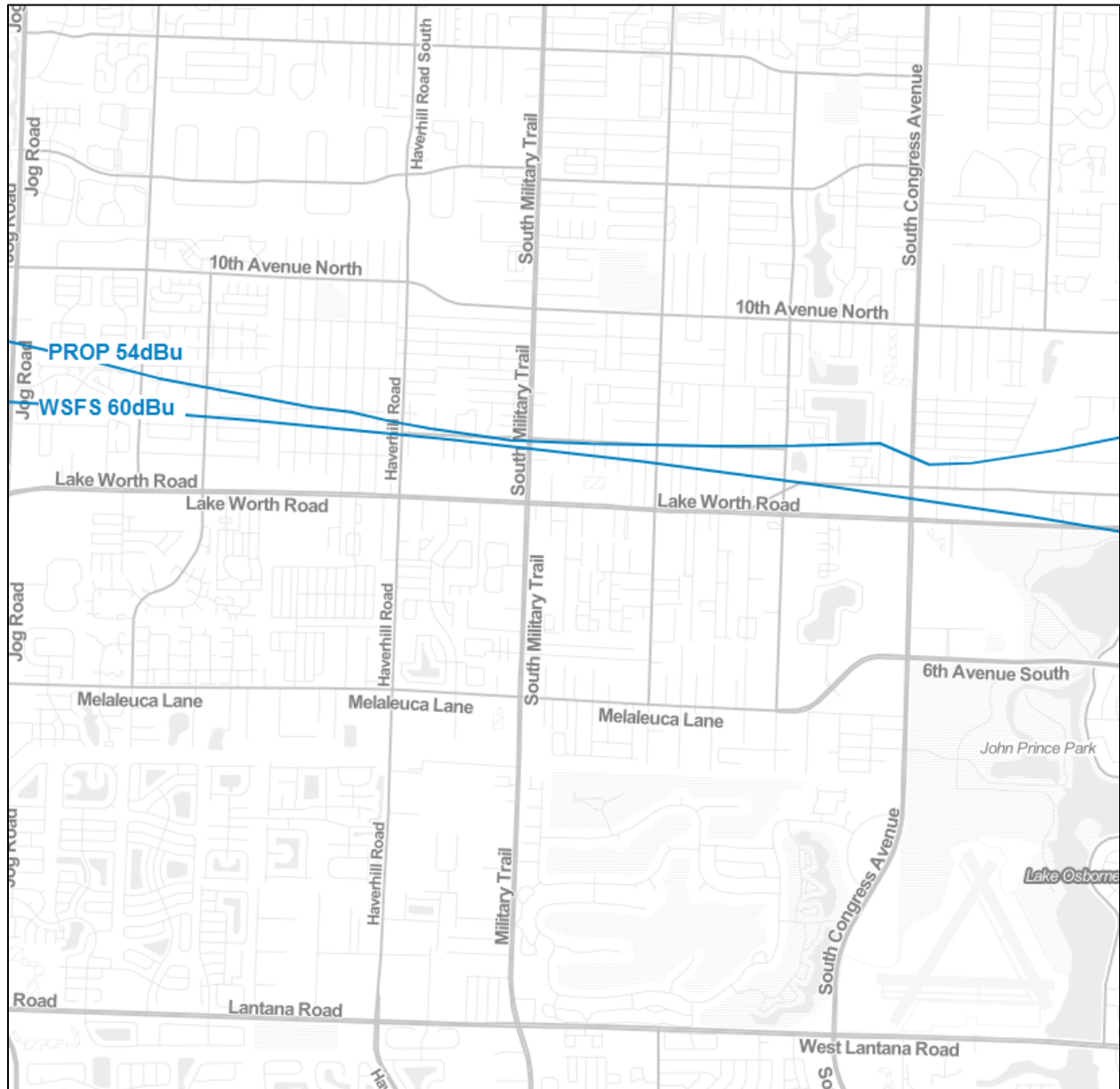
FIRST ADJACENT CHANNEL PROTECTIONS



APPLICATION vs. WJUP-LP



APPLICATION vs. WSFS



REQUEST FOR WAIVER OF §74.1204(a)
SHORT-SPACED THIRD ADJACENT CHANNEL

W279DG
West Palm Beach, FL
Channel 281L1 (104.1 MHz)

W279DG is proposing operation on Channel 281L1 from tower #3 of WPOM(AM). Operation on channel 241L1 meets all contour overlap and IF distance separation requirements with the exception of the construction permit for W284CR (BPFT-20160216ACB).

W284CR(CP) is authorized to operate on Channel 284D with 0.25 kW at 113 meters above average terrain. The proposed translator is inside the 66.3 dBu F(50, 50) service contour of W284CR(CP).

Using the U/D method¹, the proposed translator is predicted to produce an undesired interference overlap in respect to W284CR(CP) to the proposed translator's 106.3 dBu interference contour ("overlap zone"). At 250 watts ERP, the overlap zone extends to 537 meters from the radiation center which will cause the interference to reach the ground.

To address the interference reaching the ground, the applicant is proposing to utilize a 4-bay Nicom BKG-77 circular polarized antenna at 0.85 wavelength spacing. Based on the manufacturer's specifications, along the -45 degree depression angle, the 106.24 dBu interfering contour reaches an artificial floor of 16 meters above ground level. There are no tall structures or structures at higher elevation, therefore the interference contour would not cause any interference to listeners or potential listeners of W284CR(CP).

Based on the information presented, REC submits that the proposed station will not create any interference to existing or potential listeners of second adjacent channel station W284CR(CP). The applicant requests a waiver of §73.807 of the Commission's Rules in respect to W284CR(CP).

Report completed by
Michelle Bradley
Founder, REC Networks
June 1, 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).

537m OVERLAP ZONE



4-lane highway to the west of the site is at the same elevation as the base of the tower.

Proposed Power:				0.25 kW				
Antenna Height AGL:				81 m				
Interference Contour:				106.3 dBu				
Artificial RX Antenna Height:				16 m				
Antenna Type:				Nicom BKG77 - 4 bay 3/4-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	0.863	0.186	-7.30	463.43	745.79	102.17	929.37	100.26
10	0.517	0.067	-11.75	277.63	374.32	103.70	466.46	101.79
15	0.118	0.003	-24.58	63.37	251.14	94.34	312.96	92.43
20	0.161	0.006	-21.88	86.46	190.05	99.46	236.83	97.55
25	0.243	0.015	-18.31	130.49	153.80	104.87	191.66	102.96
30	0.161	0.006	-21.88	86.46	130.00	102.76	162.00	100.85
35	0.007	0.000	-49.12	3.76	113.32	76.71	141.22	74.80
40	0.120	0.004	-24.44	64.44	101.12	102.39	126.01	100.47
45	0.170	0.007	-21.41	91.29	91.92	106.24	114.55	104.33
50	0.144	0.005	-22.85	77.33	84.85	105.49	105.74	103.58
55	0.075	0.001	-28.52	40.27	79.35	100.41	98.88	98.50
60	0.001	0.000	-66.02	0.54	75.06	63.39	93.53	61.48
65	0.059	0.001	-30.60	31.68	71.72	99.20	89.37	97.29
70	0.089	0.002	-27.03	47.79	69.17	103.09	86.20	101.18
75	0.096	0.002	-26.38	51.55	67.29	103.99	83.86	102.07
80	0.086	0.002	-27.33	46.18	66.00	103.20	82.25	101.29
85	0.076	0.001	-28.40	40.81	65.25	102.22	81.31	100.31
90	0.074	0.001	-28.64	39.74	65.00	102.03	81.00	100.11