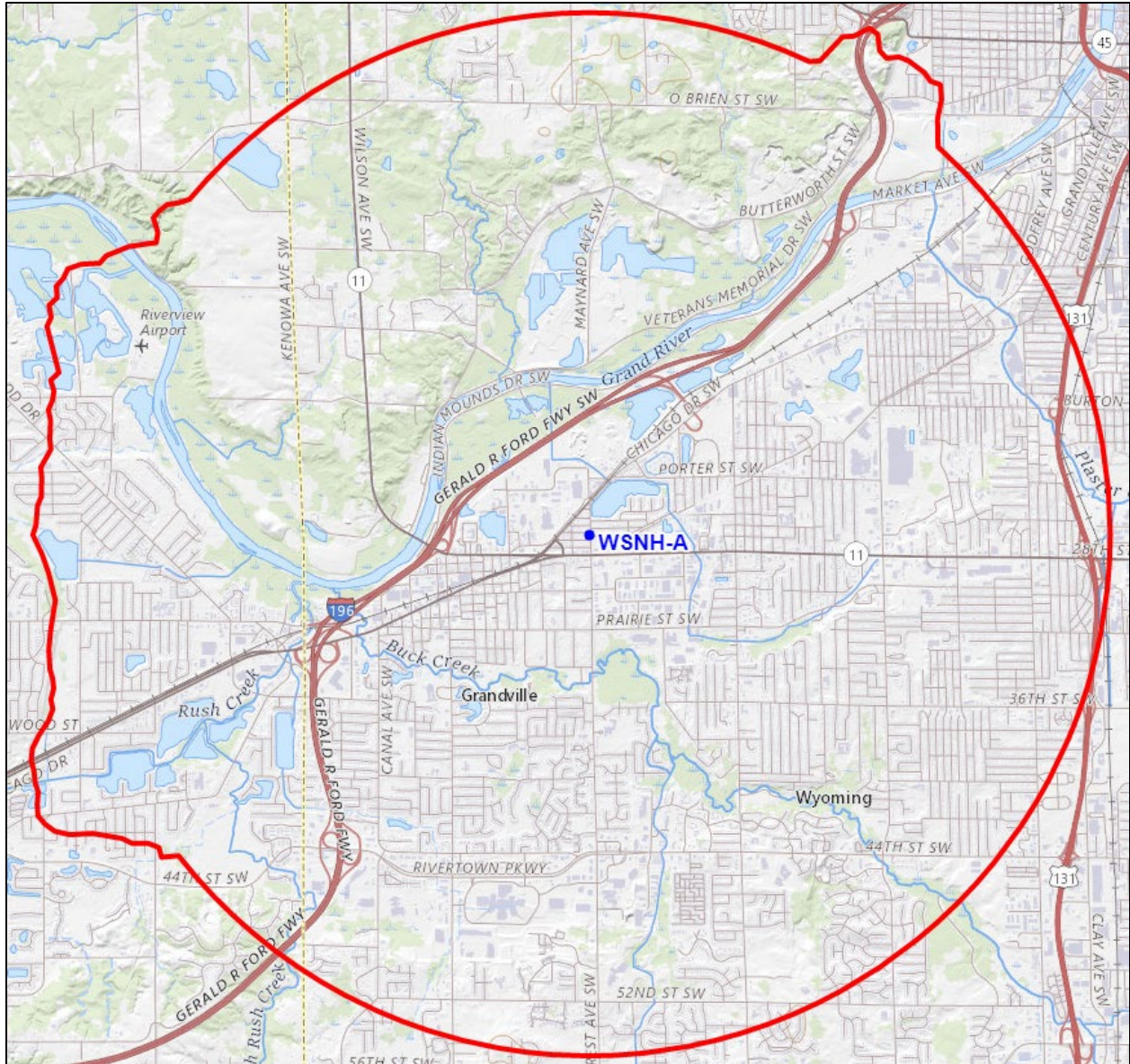




REC Networks/Michelle Bradley CBT
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Minor modification for WSNH-LP
GRAND RAPIDS, MI
IGLESIA SANDNO LAS NACIONES
BLL-20150306AZP

PROPOSED 60dBu F(50,50) SERVICE CONTOUR



GRAND RAPIDS, MI – Channel: 279LP100 (103.7 MHz) ~ ERP: 0.100 kW
Elev: 190 m ~ RCAGL: 41 meters ~ RCAMSL: 231 m ~ HAAT: 19 m (NED1)
Overall tower height: 43 meters AGL ~ ASR: None (see TOWAIR report)
NAD83 Latitude: 42° 54' 56.2" NL – Longitude: 85° 44' 39.8" WL
No impacted AM stations.
Site assurance: Applicant is owner of proposed site or structure.

R E C NETWORKS
CHANNEL REPORT

NAD83 LATITUDE: 42 - 54' 56.2" - LONGITUDE: 85 - 44' 39.8"
CHANNEL: 279 - CLASS: LP100

CHAN	FREQ	CALL	LOCATION	CLS	DIST	REQ	CLEAR	BEAR
277	103.3	WKFR-FM : Townsquare License, LLC	BATTLE CREEK	MI B	70.5	67.0	3.5	152.0
278	103.5	WAWL-LP : TRI-CITIES BROADCASTING FOUNDATION	GRAND HAVEN	MI L1	41.9	14.0	27.9	293.8
278	103.5	WTCM-FM : WTCM RADIO, INC.	TRAVERSE CITY	MI C0	171.5	111.0	60.5	1.1
279	103.7	WSNH-LP : IGLESIA SANANDO LAS NACIONES * Currently authorized facility	GRAND RAPIDS	MI L1	9.9	24.0	-14.1	40.8
279	103.7	WSJH : SMILE FM	HUBBARDSTON	MI A	78.3	67.0	11.3	71.6
279	103.7	WCZE : JENNIFER & EDWARD CZELADA	HARBOR BEACH	MI C2	239.0	91.0	148.0	68.0
279	103.7	WUVS-LP : WEST MICHIGAN COMMUNITY HELP NETWORK	MUSKEGON	MI L1	52.8	24.0	28.8	309.7
279	103.7	WXSS : AUDACY LICENSE, LLC	WAUWATOSA	WI B	177.3	112.0	65.3	277.2
279	103.7	WCSY-FM : WSJM INC	SOUTH HAVEN	MI A	80.0	67.0	13.0	211.3
280	103.9	WBZX : UP NORTH RADIO, LLC	BIG RAPIDS	MI A	89.4	56.0	33.4	21.7
281	104.1	WVGR : REGENTS OF THE UNIVERSITY OF MICHIGAN	GRAND RAPIDS	MI B	34.0	67.0	-33.0	148.5

WAIVER OF §73.807(a) REQUEST
SHORT-SPACED SECOND ADJACENT CHANNEL

WSNH-LP
Grand Rapids, Michigan
Channel 279LP100 ~ 103.7 MHz

The proposed modification is short-spaced to second-adjacent channel station WVGR, Grand Rapids, Michigan.

WVGR operates with 96 kW into a directional antenna at 221 meters height above average terrain. WVGR places a 74.8 dBu service contour at the proposed site.

Based on NED-1 terrain data, WSNH-LP proposes to operate at 19 meters height above average terrain. In accordance with §73.811(a) of the Commission's Rules, WSNH-LP is proposing to operate at 100 watts (0.1 kW) ERP.

Using the U/D method¹, the proposed LPFM station is predicted to produce an undesired interference overlap in respect to WVGR to the proposed LPFM station's 114.8 dBu interfering contour ("overlap zone"). At 100 watts ERP, the overlap zone extends to 128 meters from the radiation center.

As the proposed overlap zone reaches the ground, we must address potential interference to listeners and potential listeners of WVGR. To address this issue, the applicant proposes to use a minimum Nicom BKG-77 circular polarized antenna, 2 bays with 0.85 wavelength spacing. Based on the manufacturer's specification, the 114.8 dBu interfering contour does not reach any point lower than 4.4 meters above ground level, which would place it above all occupied structures in the surrounding area.

Based on these findings, the proposed modified LPFM station modification will not create any interference to listeners or potential listeners of WVGR. Therefore, the applicant is requesting a waiver of §73.807(a) in respect to WVGR, Grand Rapids, Michigan.

Prepared by
Michelle Bradley, CBT
REC Networks
September 16, 2022

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:				0.1 kW				
Antenna Height AGL:				41 m				
Interference Contour:				114.8 dBu				
Artificial RX Antenna Height:				4.4 m				
Antenna Type:				Nicom BKG77 - 2 bay 0.85 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	0.967	0.094	-10.29	123.43	419.94	104.16	470.42	103.18
10	0.871	0.076	-11.20	111.18	210.77	109.24	236.11	108.26
15	0.711	0.051	-12.96	90.75	141.41	110.95	158.41	109.96
20	0.518	0.027	-15.71	66.12	107.01	110.62	119.88	109.63
25	0.310	0.010	-20.17	39.57	86.60	108.00	97.01	107.01
30	0.112	0.001	-29.02	14.30	73.20	100.61	82.00	99.63
35	0.062	0.000	-34.15	7.91	63.81	96.67	71.48	95.68
40	0.198	0.004	-24.07	25.27	56.94	107.75	63.78	106.76
45	0.288	0.008	-20.81	36.76	51.76	111.83	57.98	110.84
50	0.336	0.011	-19.47	42.89	47.78	113.86	53.52	112.88
55	0.349	0.012	-19.14	44.55	44.68	114.77	50.05	113.79
60	0.331	0.011	-19.60	42.25	42.26	114.80	47.34	113.81
65	0.295	0.009	-20.60	37.65	40.38	114.19	45.24	113.21
70	0.246	0.006	-22.18	31.40	38.95	112.93	43.63	111.94
75	0.197	0.004	-24.11	25.15	37.89	111.24	42.45	110.25
80	0.151	0.002	-26.42	19.27	37.16	109.10	41.63	108.11
85	0.122	0.001	-28.27	15.57	36.74	107.34	41.16	106.36
90	0.117	0.001	-28.64	14.93	36.60	107.01	41.00	106.03

TOWAIR REPORT

Grand Rapids, Michigan
Channel 279LP100 ~ 103.7 MHz

DETERMINATION Results							
PASS SLOPE(100:1)NO FAA REQ - 4975.0 Meters (16321.9 Feet)away & below slope by 0.0 Meters (0.0 Feet)							
Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	42-55-57.00N	085-48-3.00W	RIVERVIEW	OTTAWA JENISON, MI	183.8	1194.8
Your Specifications							
NAD83 Coordinates							
Latitude						42-54-56.2 north	
Longitude						085-44-39.8 west	
Measurements (Meters)							
Overall Structure Height (AGL)						43	
Support Structure Height (AGL)						0	
Site Elevation (AMSL)						190	
Structure Type							
GTOWER - Guyed Structure Used for Communication Purposes							

NEARBY AM FACILITIES

Call	Sched	Freq	Wave	Dist	Req	Elec	Req	Notify
WFUR	ND-U	1570	191m	5703m	191m	81.01	60	NO
WBBL	ND-U	1340	224m	5402m	224m	69.14	60	NO
WYGR	ND-DC	1530	196m	1283m	196m	78.95	60	NO

No notification to any AM station required.