

SPACING

REFERENCE
 42 22 19.00 N. CLASS = L1 Int = DATA 10-16-23
 83 04 50.00 W. Current Spacings to 2nd Adj. SEARCH
 12-10-23

----- Channel 272 - 102.3 MHz -----									
Call	Channel	Location			Azi	Dist	FCC	Margin	
WDET-FM	LIC 270B	Detroit	MI		147.7	2.66	66.5	-63.8	
NEW+	USE -D 272A	Windsor	ON		157.4	6.67	66.0	-59.3	
CJNR-FM+	USE -D 272A	Windsor	ON		151.3	9.46	66.0	-56.5	
WDKL	LIC-D 274B	Mount Clemens	MI		318.3	14.77	66.5	-51.7	
CJAMFM	LIC -D 218D	Windsor	ON		172.0	7.47	4.0	3.5	
R43103	ADD 218D	Windsor	ON		172.1	7.47	3.0	4.5	
R28997	DEL 218D	Windsor	ON		172.1	7.47	3.0	4.5	
CJAMFM	RUL 218D	Windsor	ON		172.0	7.47	3.0	4.5	
CJAMFM	RUL 218D	Windsor	ON		172.0	7.47	3.0	4.5	
W272DG	CP -D 272D	Pittsfield Township	MI		260.4	46.86	31.5	15.4	
WGRT	LIC 272A	Port Huron	MI		32.1	91.73	66.5	25.2	
W272DG	LIC 272D	Pittsfield Township	MI		258.1	50.97	25.5	25.5	
WPOS-FM	LIC 272A	Holland	OH		212.3	97.99	66.5	31.5	
WIOG	LIC 273B	Bay City	MI		333.3	137.33	96.5	40.8	
CHST-FM+	VAC -D 272C1	London	ON		66.0	162.12	113.0	49.1	
C218LP	LIC -D 218D	Walpole Island	ON		63.1	54.70	4.0	50.7	
WCPZ	LIC-Z 274B	Sandusky	OH		160.8	122.33	66.5	55.8	
WDOK	LIC 271B	Cleveland	OH		133.5	158.64	96.5	62.1	

 Reference station has protected zone issue: Canada
 All separation margins include rounding
 See Second Adj Waiver
 See Canadian Exhibit

Applicant respectfully requests a "second adjacent channel waiver" with regards to Section 47 C.F.R. Section 73.807 of the FCC rules based upon the "Living Way" precedent (Living Way Ministries, Inc., Memorandum Opinion and Order, 17 FCC Red 17054, 17056, ¶ 5 (2002), recon. denied 23 FCC Red 15070 (2008)). This will be accomplished by using Free Space methodology of calculation.

The second adjacent channel is (with signal strength at the proposed site):

WDET-FM LIC 270B 112.0 dBu
 WDKL LIC-D 274B 84.6 dBu

Using U/D methodology, interference will occur when WDKLs signal strength's interfering signal exceeds the desired signal by 40 dBu. So the area of predicted interference would then be bounded by the 124.6 dBu contour.

The distance to this contour, using free space method:

$$D = (7.01 \cdot P^{1/2}) / E,$$

where P is power (watts), E is field strength (v/m), and D is distance to contour (meters):

P = 36 w (49.4 m HAAT), E = 124.6 dBu D = 24.1 meters

Since the interference area is a 24.1 meter radius and the antenna is located 42.8 m above ground, there is no interference to populated areas on the ground.

Due to zero population within this radiation radius, this meets the "Living Way" Criteria to qualify for a Waiver of 47 C.F.R. Section 73.807.

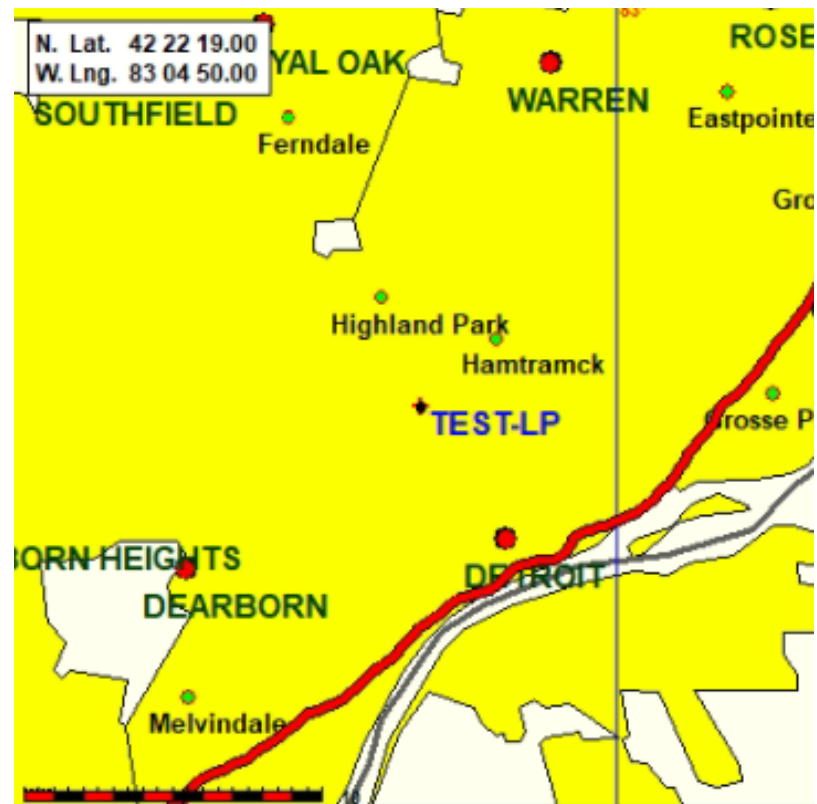
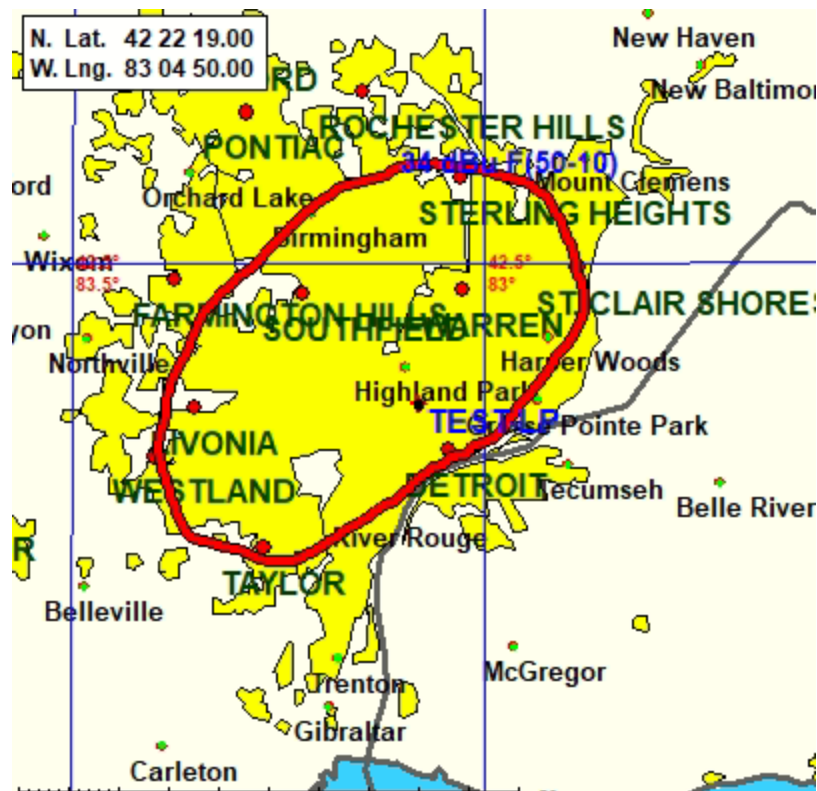
Thus, the applicant requests a second adjacent waiver based upon evidence no interference is proposed.

CANADIAN FACILITY PROTECTION

Regarding CJNR-FM+/NEW+ CH 272A: The CRTC does not have any reference to these being licensed currently-broadcasting stations within the CRTC channel database

<https://ised-isde.canada.ca/site/spectrum-management-system/en/broadcasting-services#Database>. These are assumed to be reservations and will not have any incoming interference concern to the proposed LPFM.

The proposed does not impart any interference across the Canadian border onto Canadian soil, denoted by the use of directional antenna and the proposed 34 dBu F(50,10) contour below. Hence zero interference would be imparted to any proposed CJNR-FM+/NEW+ CH 272A in Canada.



TEST-LP

12-10-2023

RMS(V)= .718

Graph is Relative Field

Azi	Field	dbk	kw
000	1.000	-14.685	0.034
010	1.000	-14.685	0.034
020	1.000	-14.685	0.034
030	1.000	-14.685	0.034
040	0.824	-16.367	0.023
050	0.645	-18.494	0.014
060	0.508	-20.568	0.009
070	0.321	-24.555	0.004
080	0.211	-28.200	0.002
090	0.139	-31.825	0.001
100	0.113	-33.624	0.000
110	0.099	-34.773	0.000
120	0.087	-35.895	0.000
130	0.071	-37.660	0.000
140	0.074	-37.301	0.000
150	0.065	-38.427	0.000
160	0.068	-38.035	0.000
170	0.068	-38.035	0.000
180	0.080	-36.623	0.000
190	0.110	-33.857	0.000
200	0.175	-29.824	0.001
210	0.311	-24.830	0.003
220	0.576	-19.477	0.011
230	0.734	-17.371	0.018
240	1.000	-14.685	0.034
250	1.000	-14.685	0.034
260	1.000	-14.685	0.034
270	1.000	-14.685	0.034
280	1.000	-14.685	0.034
290	1.000	-14.685	0.034
300	1.000	-14.685	0.034
310	1.000	-14.685	0.034
320	1.000	-14.685	0.034
330	1.000	-14.685	0.034
340	1.000	-14.685	0.034
350	1.000	-14.685	0.034

