Long Form Application
BNPFT- 20180130AEO
Facility ID No. 202301

This exhibit is for Long Form 349 Application of Facility ID No. 202301, BNPFT- 20180130AEO. It specifies no material changes from the short form.

Antenna Location

The proposed antenna is to be mounted on the existing support tower which is identified by registration number 1027446 at 65 meters above ground, having a horizontal plane azimuth gain pattern as given in **Figure 0** below. Below as **Figure 1** is an overlap and spacing study from which it can be determined that this proposal is within the licensed and permitted protected contour of **second** adjacent channel stations WYJB and WAJZ.

73.1204 Compliance

We will demonstrate that a lack of population and/or other factors allow this proposal to be compliant with 74.1204. The process commonly called "Living Way", allows for the use of D/U Analysis, also known as "signal strength ratio methodology" to be utilized to demonstrate compliance. In this instant case the facility to be protected is on a second or third adjacent channel and is to be afforded protection from signals 40 dB stronger than the protected facility presents near the proposed translator antenna location.

Concerning WAJZ; In **Figure 2** a map showing the predicted 62.9 dBu signal contour of the protected WAJZ facility at the proposed translator antenna location is given. This proposal can only cause predicted interference to the protected facility by having a signal exceeding 102.9 dBu (62.9 + 40) in a habitable/populated area. Utilizing the line of sight equation shown in **Figure 3** which considers the vertical elevation pattern of the proposed antenna, it has been determined that a 102.9 dBu signal developed by 250 watts, as proposed, emitted by the proposed antenna mounted 65 meters above ground, will not reach elevated habitable areas or ground level. With examination of the image in **Figure 4** it can be determined that no habitable space extends into the confines of this contour.

Concerning WYJB; In **Figure 2** a map showing the predicted 77.0 dBu signal contour of the protected WYJB facility at the proposed translator antenna location is given. This is a stronger signal than WAJZ, thus by protecting WAJZ, WYJB is inherently protected.

Thus the provisions of the rules section concerning prohibited overlap will not apply as it has been demonstrated that no actual interference will occur due to a lack of population and other factors as applied in this instant proposal.

Fill-in and Minor Change Status

This proposal is to serve as a fill-in translator for station WOFX Facility ID 37233 Troy, New York. The map of **Figure 5** demonstrates that the proposed 60 dBu contour is contained within that of the 2 mV/m of that facility.

As there is no change in location the short and long from facility are considered to have the required service contour overlap.

RF Fields Statement

The proposed facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The antenna system is an array of 8 "Scala"/Kathrine CL-FMV antenna mounted 2 each in 4 levels at full wave spacing, centered 65 meters above ground. For purposes of this analysis the FM Model program has been set to calculate values for a "Ring-and-Stub" type of antenna element array, operated with an effective radiated power of 0.25 Kilowatts in the vertical polarity. At 2 meters above the surface, at 11.2 meters from the base of the tower, this proposal will contribute worst case, 1.99 microwatts per square centimeter, or 0.2 percent of the allowable ANSI limit for controlled exposure, and 1.0 percent of the allowable limit for uncontrolled exposure. This figure is less than 5% of the applicable FCC exposure limit at all locations extending out from the base of the tower. Section 1.1307(b)(3) excludes applications when the calculated level is predicted to be less than 5% of the applicable exposure limit. It is therefore believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection..

Figure 0. Antenna Pattern

1776449 04-18-2018 RMS(V)= .918

Graph is Relative Field

Azi	Field	dBk	kW
000	1.000	-06.021	0.250
010	1.000	-06.021	0.250
020	1.000	-06.021	0.250
030	1.000	-06.021	0.250
040	1.000	-06.021	0.250
050	1.000	-06.021	0.250
060	1.000	-06.021	0.250
070	1.000	-06.021	0.250
080	1.000	-06.021	0.250
090	1.000	-06.021	0.250
100	1.000	-06.021	0.250
110	0.650	-09.762	0.106
120	0.400	-13.979	0.040
130	0.400	-13.979	0.040
140	0.400	-13.979	0.040
150	0.200	-20.000	0.010
160	0.200	-20.000	0.010
170	0.650	-09.762	0.106
180	1.000	-06.021	0.250
190	1.000	-06.021	0.250
200	1.000	-06.021	0.250
210	1.000	-06.021	0.250
220	1.000	-06.021	0.250
230	1.000	-06.021	0.250
240	1.000	-06.021	0.250
250	1.000	-06.021	0.250
260	1.000	-06.021	0.250
270	1.000	-06.021	0.250
280	1.000	-06.021	0.250
290	1.000	-06.021	0.250
300	1.000	-06.021	0.250
310	1.000	-06.021	0.250
320	1.000	-06.021	0.250
330	1.000	-06.021	0.250
340	1.000	-06.021	0.250
350	1.000	-06.021	0.250

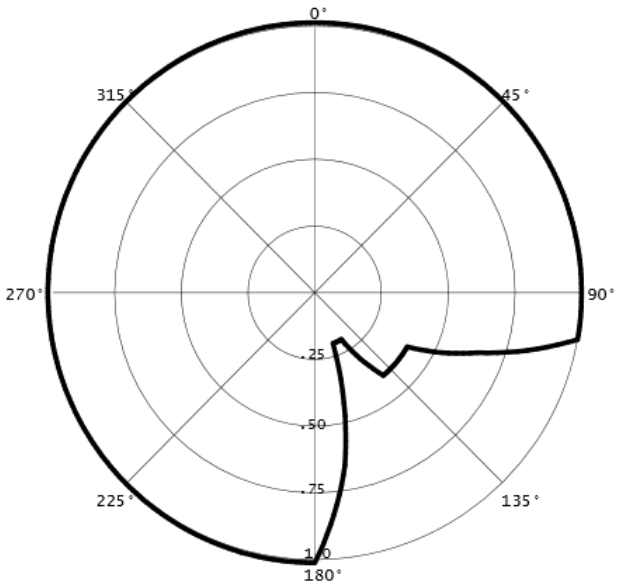

Figure 1. Overlap and Spacing Study

BNPFT-20180130AEO Fac ID 202301 For WOFX
Capstar Tx, Llc

REFERENCE CH# 240D - 95.9 MHz, Pwr= 0.25 kW DA, HAAT= 0.0 M, COR= 213 M DISPLAY DATES
42 39 50.2 N. Average Protected F(50-50)= 7.09 km DATA 04-18-18
73 40 41.8 W. Standard Directional SEARCH 04-18-18

CH CITY	CALL	TYPE STATE	ANT	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
240D Albany	1776440	APP NY	DC_	0.0 0.0	0.00 BNPFT20180130AEO	42 39 50.2 73 40 41.8	0.250	0.00 213	0.00 Capstar Tx, Llc	64.5R	-64.5M
238B Albany	WYJB	LIC NY	_CN	263.5 83.2	26.48 BLH19860131KB	42 38 11.0 74 00 00.0	12.000 312	6.0 547	77.2 6 Johnson Road Licenses, I	3.7	-52.5*
240A Pittsfield	WBEC-FM	LIC MA	_CX	130.9 311.1	42.66 BMLH20171114AAT	42 24 44.1 73 17 06.6	1.000 170	73.4 567	24.7 Townsquare Media Pittsfiel	-35.1*	3.8
242A Voorheesville	WAJZ	LIC NY	NCX	263.5 83.3	26.53 BLH20020823AAO	42 38 11.0 74 00 02.0	0.470 293	1.5 532	32.1 6 Johnson Road Licenses, I	8.2	-6.7*
240A Queensbury	WCQL	LIC NY	_CX	355.5 175.4	84.32 BMLH20070129AMR	43 25 12.0 73 45 37.0	0.380 388	72.5 668	24.6 Regional Radio Group, Llc	-5.3	5.4
293B Albany	WPYX	LIC NY	_CX	263.4 83.1	26.68 BMLH20101012ADP	42 38 09.0 74 00 05.0	15.500 275	0.0 515	0.0 Capstar Tx, Llc	14.5R	12.2M
242D Buskirk	W242AL	LIC NY	_C_	30.4 210.5	38.47 BLFT20100611ABB	42 57 44.0 73 26 21.0	0.080 -21	0.6 174	5.3 Absolute Broadcasting, Llc	28.2	32.0
242D Williamstown	W242AT	LIC MA	_C_	82.3 262.6	39.15 BMLFT20070409ACS	42 42 36.0 73 12 12.0	0.250 -220	1.1 220	7.1 University Of Massachusett	31.0	31.0
243D Bennington	1777528	APP VT	DC_	54.8 235.1	46.76 BNPFT20180129AEL	42 54 19.0 73 12 32.0	0.250	0.6 253	5.1 Shires Media Partnership,	39.1	40.6
240A Liberty	WVOS-FM	LIC NY	DCN	220.5 39.8	132.60 BLH19921030KF	41 45 09.0 74 43 01.0	6.000 100	73.6 553	22.7 Bold Gold Media Group, L.p	42.3	56.3
240L1 Oneonta	WJIH-LP	LIC NY	___	258.2 77.3	114.27 BLL20130222AAA	42 26 46.5 75 02 30.9	0.100	361	78.8 Spirit And Truth Christian	54.6	
241A Poughkeepsie	WPKF	LIC NY	_CX	190.4 10.2	104.65 BLH20130702ACG	41 44 16.0 73 54 20.0	3.500 81	32.6 186	21.9 Cc Licenses, Llc	58.1	61.7
243B Hartford	WTIC-FM	LIC CT	_CX	143.7 324.3	122.26 BMLH20131029ABW	41 46 27.0 72 48 20.0	20.000 247	5.2 334	61.1 Cbs Radio Stations Inc.	112.5	60.4
239B Hartford-meriden	WKSS	LIC CT	DCN	150.4 331.0	140.56 BMLH19980820KA	41 33 41.0 72 50 39.0	16.500 268	75.5 363	64.4 Capstar Tx, Llc	61.1	68.2
239D Poughkeepsie	W239BL	LIC NY	DC_	194.1 13.9	110.52 BLFT20120305ADK	41 41 58.0 74 00 12.0	0.250 263	32.0 378	21.5 Digital Radio Broadcasting	63.9	66.8
241B1 Rome	WODZ-FM	LIC NY	_CN	294.1 113.1	133.38 BLH19970926KB	43 08 39.0 75 10 45.0	7.400 184	52.6 429	40.5 Townsquare Media Licensee	65.8	66.0
237A Greenfield	WPVQ	CP MA	_CN	87.2 267.9	87.75 BPH20171101ABY	42 41 53.0 72 36 20.0	0.610 224	1.6 458	20.2 Saga Communications Of New	79.1	66.5
237A Greenfield	WPVQ	LIC MA	_C_	87.2 267.9	87.75 BLH20010410AAB	42 41 50.0 72 36 20.0	0.570 232	1.6 454	19.6 Saga Communications Of New	79.1	67.0
243A Speculator	WYVS	LIC NY	NCX	330.1 149.7	110.50 BLH20121127ALP	43 31 26.0 74 21 39.0	2.600 152	2.9 756	37.6 Tesiero, Joseph C	91.9	71.8
243D Hyde Park	W243EI	CP NY	DC_	185.4 5.4	85.71 BNPFT20180314ADC	41 53 47.0 73 46 34.0	0.150	0.7 177	5.5 Joseph Paul Ferraro	71.9	79.1
241B Worcester	WSRS	LIC MA	_CX	104.6 285.8	150.74 BMLH20051227AFL	42 18 34.0 71 54 13.0	16.500 263	71.5 503	61.0 Capstar Tx, Llc	72.7	76.7
242D Poultney	1776546	APP VT	_C_	21.9 202.3	100.85 BNPFT20180129AAN	43 30 16.0 73 12 40.0	0.250	1.1 220	9.2 Pine Tree Broadcasting Com	90.5	90.5
239B Manchester	WZID	LIC NH	_CN	77.5 258.9	174.00 BLH19870928KA	42 59 02.0 71 35 22.0	14.500 282	73.8 431	62.9 Saga Communications Of New	93.1	97.0

Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference zone= East Zone, Co to 3rd adjacer
All separation margins (if shown) include rounding.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside restricted contour.

Figure 2. Contour Map

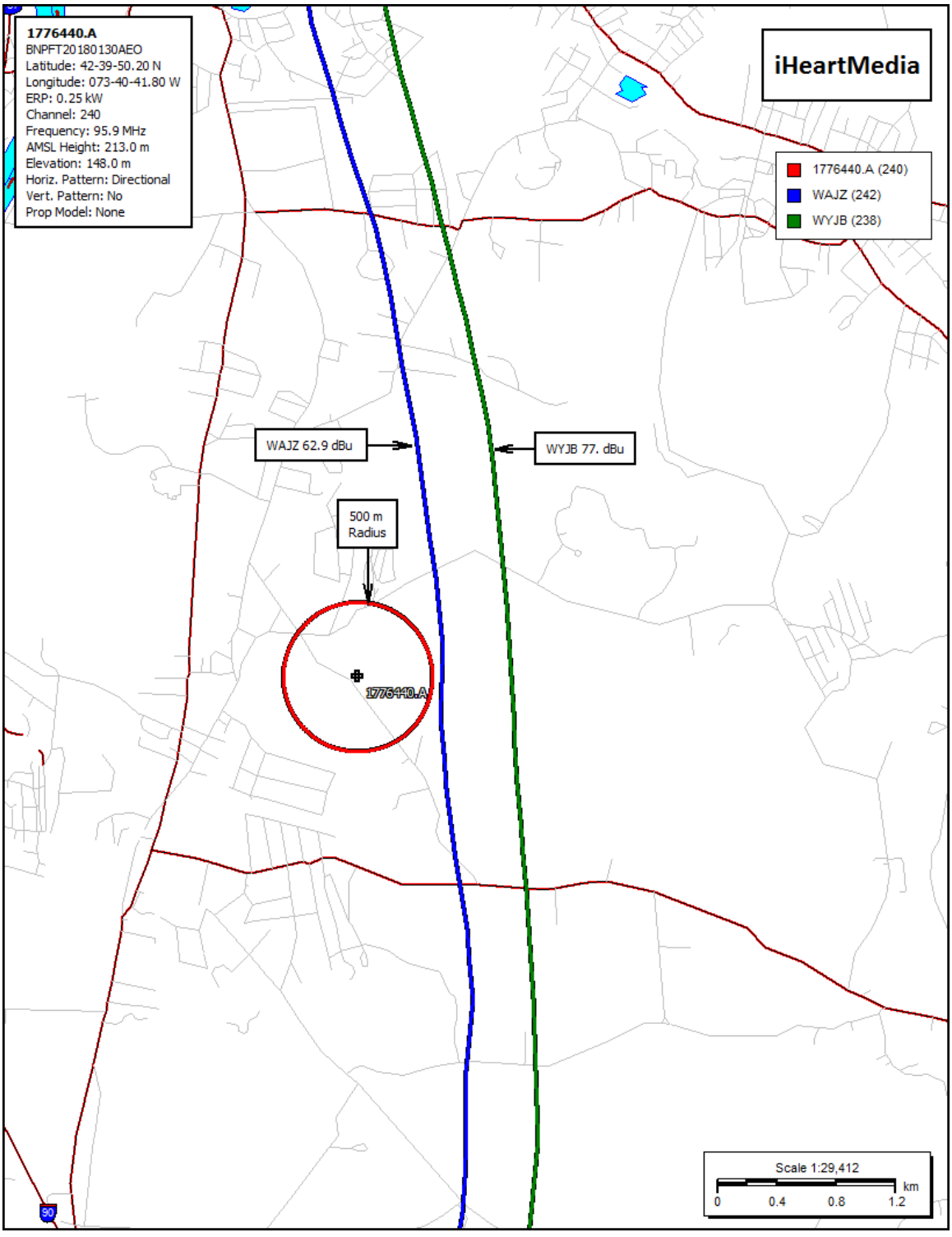

Figure 3. Signal Level at or Near Ground Level

Proposed Antenna:	Scala CL-FMV 4 Stack	
Proposed Power:	0.25	kW
Antenna Height AGL:	65	meters
Interference Contour:	102.9	dBu f(50:10)
Artificial Rcv Antenna Height:	2	meters
Distance (Free Space) Equation:	=(10^((106.92-[desired dBu]+[ERP in dBk])/20))*1000	
Field Strength (dBu) Equation	"=106.92-(20*(LOG10[DistMeters]/1000)))+[ERPin dBk]	

Depression Angle Below Horizon	Antenna Relative Field	ERP in kW	ERP in dBk	Distance from Ant. to Interf Contour	Distance from Ant. to Artificial Plane	Field Strengt in dBu @ Artificial Plane	Distance from Ant. to Ground Level	Field Strength in dBu @ Ground Level
0°	1.000	0.250	-6.02	794.27 m	infinite	---	infinite	---
-5°	0.825	0.170	-7.69	655.28 m	722.84 m	102.05 dBu	745.79 m	101.78 dBu
-10°	0.429	0.046	-13.37	340.74 m	362.80 m	102.36 dBu	374.32 m	102.08 dBu
-15°	0.027	0.000	-37.39	21.45 m	243.41 m	81.80 dBu	251.14 m	81.53 dBu
-20°	0.189	0.009	-20.49	150.12 m	184.20 m	101.12 dBu	190.05 m	100.85 dBu
-25°	0.186	0.009	-20.63	147.73 m	149.07 m	102.82 dBu	153.80 m	102.55 dBu
-30°	0.060	0.001	-30.46	47.66 m	126.00 m	94.46 dBu	130.00 m	94.18 dBu
-35°	0.067	0.001	-29.50	53.22 m	109.84 m	96.61 dBu	113.32 m	96.33 dBu
-40°	0.120	0.004	-24.44	95.31 m	98.01 m	102.66 dBu	101.12 m	102.39 dBu
-45°	0.091	0.002	-26.84	72.28 m	89.10 m	101.08 dBu	91.92 m	100.81 dBu
-50°	0.030	0.000	-36.48	23.83 m	82.24 m	92.14 dBu	84.85 m	91.87 dBu
-55°	0.015	0.000	-42.50	11.91 m	76.91 m	86.70 dBu	79.35 m	86.43 dBu
-60°	0.028	0.000	-37.08	22.24 m	72.75 m	92.61 dBu	75.06 m	92.33 dBu
-65°	0.024	0.000	-38.42	19.06 m	69.51 m	91.66 dBu	71.72 m	91.39 dBu
-70°	0.014	0.000	-43.10	11.12 m	67.04 m	87.29 dBu	69.17 m	87.02 dBu
-75°	0.010	0.000	-46.02	7.94 m	65.22 m	84.61 dBu	67.29 m	84.34 dBu
-80°	0.010	0.000	-46.02	7.94 m	63.97 m	84.78 dBu	66.00 m	84.51 dBu
-85°	0.010	0.000	-46.02	7.94 m	63.24 m	84.88 dBu	65.25 m	84.61 dBu
-90°	0.010	0.000	-46.02	7.94 m	63.00 m	84.91 dBu	65.00 m	84.64 dBu

Figure 4. Image of Proposed Support Tower

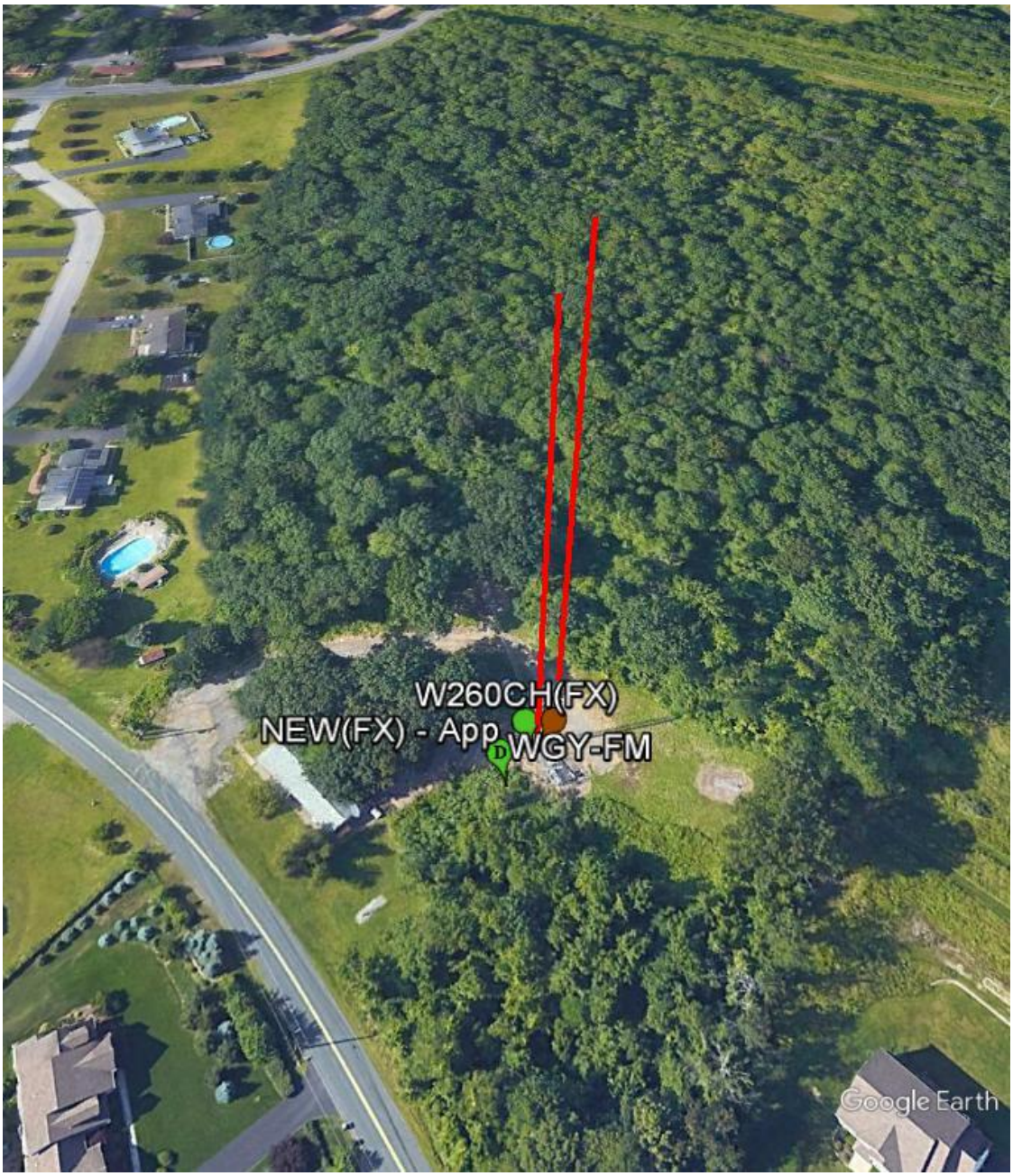

Figure 5. Fill-in and Minor Change Contour Map