

Minor Modification BNPFT- 20180507ABM Facility ID No. 202301

This exhibit is for Minor Modification of the permit of Facility ID No. 202301, BNPFT-20180507ABM. It specifies only a change in height and in antenna configuration.

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 4 "Scala"/Kathrine CL-FMV antenna mounted in a vertical stack, centered 69 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

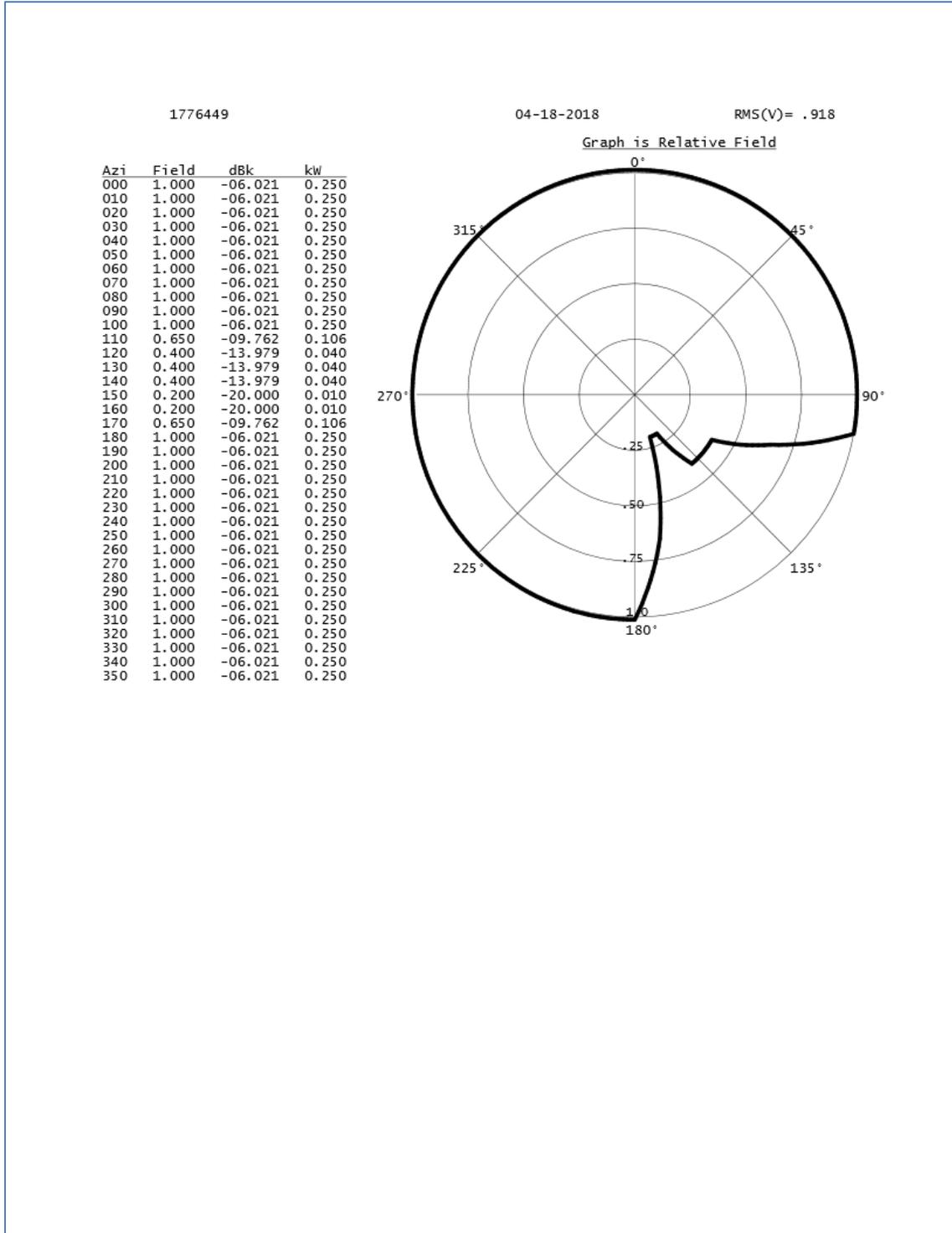


Figure 1. Overlap and Spacing Study

w240EC Mod Capstar TX, Llc																
REFERENCE	CH#	240D	-	95.9	MHZ	Pwr=	0.25	kw	DA,	HAAT=	93.1	M,	COR=	217	M	DISPLAY DATES
42 39 50.2 N. 73 40 41.8 W.						Average Protected F(50-50)=	12.43	km								DATA 05-29-19 SEARCH 05-31-19
CH	CALL	TYPE	ANT	AZI	DIST	LAT	PWR(kw)	INT(km)	PRO(km)	*IN*	*OUT*					
CITY	STATE			<--	FILE #	LNG	HAAT(M)	COR(M)	LICENSEE	(Overlap	in km)					
240D	W240EC	CP_DV_	NY	0.0	0.00	42 39 50.2	0.250					---Reference---				
Albany				0.0	BNPFT20180507ABM	73 40 41.8		213				Capstar TX, Llc				
238B	WYJB	LIC_CN	NY	263.5	26.48	42 38 11.0	12.000	6.0	77.2	3.4	-52.5*					
Albany				83.2	BLH19860131KB	74 00 00.0	312	547	6 Johnson Road Licenses, I							
240A	WBEC-FM	LIC_CX	MA	130.9	42.66	42 24 44.1	1.000	80.5	24.7	-44.6*	0.5					
Pittsfield				311.1	BMLH20171114AAT	73 17 06.6	170	567	Townsquare Media Pittsfiel							
240A	AL8455	RSV-A	NY	0.3	82.20	43 24 12.0	6.000	102.0	39.7	-36.9*	-11.8					
Queensbury				180.3	RM10671	73 40 25.0	100	323								
242A	WAJZ	LIC_NCX	NY	263.5	26.53	42 38 11.0	0.470	1.5	32.1	8.0	-6.7*					
Voorheesville				83.3	BLH20020823AAO	74 00 02.0	293	532	6 Johnson Road Licenses, I							
240A	WQOL	LIC_CX	NY	355.5	84.32	43 25 12.0	0.380	74.2	24.6	-6.3	1.1					
Queensbury				175.4	BMLH20070129AMR	73 45 37.0	388	668	Regional Radio Group, Llc							
293B	WPYX	LIC_CX	NY	263.4	26.68	42 38 09.0	15.500	0.0	0.0	14.5R	12.2M					
Albany				83.1	BMLH20101012ADP	74 00 05.0	275	515	Capstar TX, Llc							
242D	W242AL	LIC_C_	NY	30.4	38.47	42 57 44.0	0.080	0.6	5.3	24.5	30.5					
Buskirk				210.5	BLFT20100611ABB	73 26 21.0	-21	174	Absolute Broadcasting, Llc							
242D	W242AT	LIC_C_	MA	82.3	39.15	42 42 36.0	0.250	1.1	7.1	30.6	31.0					
Williamstown				262.6	BMLFT20070409ACS	73 12 12.0	-220	220	University Of Massachusett							
243D	W243EL	CP_DC_	VT	54.8	46.76	42 54 19.0	0.250	0.7	5.5	35.9	40.0					
Bennington				235.1	BNPFT20180426AAC	73 12 32.0		253	Shires Media Partnership,							
240A	WVOS-FM	LIC_DCX	NY	220.5	132.60	41 45 09.0	6.000	74.7	22.7	41.7	54.7					
Liberty				39.8	BMLH20180521ABA	74 43 01.0	100	553	Bold Gold Media Group, L.p							
241A	WPKF	LIC_CX	NY	190.4	104.65	41 44 16.0	3.500	34.9	21.9	53.9	55.7					
Poughkeepsie				10.2	BLH20130702ACG	73 54 20.0	81	186	CC Licenses, Llc							
240L1	WJH-LP	LIC_	NY	258.2	114.57	42 26 46.5	0.100			46.5R	68.1M					
Oneonta				77.3	BLL20130222AAA	75 02 30.9		361	Spirit And Truth Christian							
239B	WKSS	LIC_DCN	CT	150.4	140.56	41 33 41.0	16.500	75.0	64.4	54.6	65.8					
Hartford-meriden				331.0	BMLH19980820KA	72 50 39.0	268	363	Capstar TX, Llc							
241B1	WODZ-FM	LIC_CN	NY	294.1	133.38	43 08 39.0	7.400	53.5	40.5	64.1	59.6					
Rome				113.1	BLH19970926KB	75 10 45.0	184	429	Townsquare Media Licensee							
243B	WTIC-FM	LIC_CX	CT	143.7	122.26	41 46 27.0	20.000	5.2	61.1	107.0	60.1					
Hartford				324.3	BMLH20131029ABW	72 48 20.0	247	334	Entercom License, Llc							
239D	W239BL	LIC_DC_	NY	194.1	110.52	41 41 58.0	0.250	31.9	21.5	62.4	66.4					
Poughkeepsie				13.9	BLFT20120305ADK	74 00 12.0	263	378	Digital Radio Broadcasting							
237A	WPVQ-FM	LIC_CX	MA	87.2	87.75	42 41 53.0	0.610	1.6	20.2	78.9	66.0					
Greenfield				267.9	BLH20180405AAL	72 36 20.0	224	458	Saga Communications Of New							
243D	W243EI	CP_DC_	NY	185.4	85.71	41 53 47.0	0.150	0.7	5.5	69.5	77.6					
Hyde Park				5.4	BNPFT20180314ADC	73 46 34.0		177	Joseph Paul Ferraro							
243A	WYVS	LIC_NCX	NY	330.1	110.50	43 31 26.0	2.600	2.9	37.6	91.4	71.7					
Speculator				149.7	BLH20121127ALP	74 21 39.0	152	756	Tesiero, Joseph C							
241B	WSRS	LIC_CX	MA	104.6	150.74	42 18 34.0	16.500	71.5	61.0	72.2	76.4					
Worcester				285.8	BMLH20051227AFL	71 54 13.0	263	503	Capstar TX, Llc							
242D	W242DF	CP_C_	VT	21.9	100.85	43 30 16.0	0.250	1.1	9.2	84.2	89.8					
Poultney				202.3	BNPFT20180507ACJ	73 12 40.0		220	Pine Tree Broadcasting Com							
239B	WZID	LIC_CN	NH	77.5	174.00	42 59 02.0	14.500	74.1	62.9	91.4	96.8					
Manchester				258.9	BLH19870928KA	71 35 22.0	282	431	Saga Communications Of New							

Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
In & Out distances between contours are shown at closest points. Reference zone= East Zone, Co to 3rd adjacent.
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), Beamtillt(Y,N,X)
"="affixed to 'IN' or 'OUT' values = site inside restricted contour.

Figure 2. Contour Map

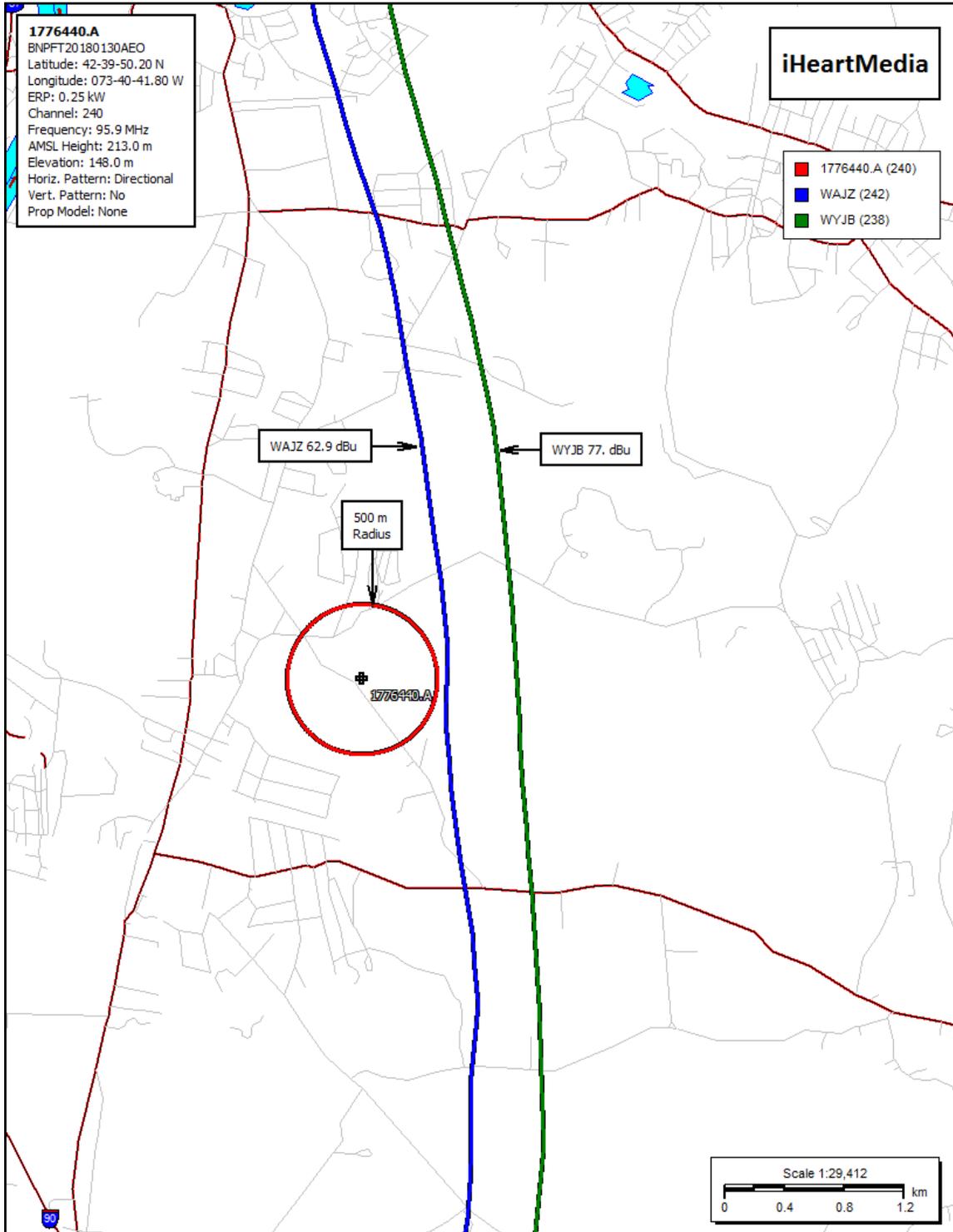


Figure 3. Signal Level at or Near Ground Level

Proposed Antenna: Scala 4xCL-FMV 4 Stack
Proposed Power: 0.25 kW
Antenna Height AGL: 69 meters
Interference Contour: 102.9 dBu f(50:10)
Artificial Rcv Antenna Height: 2 meters
Distance (Free Space) Equation: $= (10^{((106.92 - [\text{desired dBu}] + [\text{ERP in dBk}]) / 20)}) * 1000$
Field Strength (dBu) Equation: $" = 106.92 - (20 * (\text{LOG}_{10}[\text{DistMeters} / 1000])) + [\text{ERP in dBk}]$

Depression				Distance				
Angle	Antenna			from Ant.	Distance from Ant. to	Field Strength in dBu @	Distance from Ant. to	Field Strength in dBu @
Below	Relative	ERP	ERP	to Interf	Artificial Plane	Artificial Plane	to Ground Level	Ground Level
Horizon	Field	in kW	in dBk	Contour				
0°	1.000	0.250	-6.02	794.27 m	infinite	---	infinite	---
-5°	0.825	0.170	-7.69	655.28 m	768.74 m	101.51 dBu	791.69 m	101.26 dBu
-10°	0.429	0.046	-13.37	340.74 m	385.84 m	101.82 dBu	397.36 m	101.56 dBu
-15°	0.027	0.000	-37.39	21.45 m	258.87 m	81.27 dBu	266.60 m	81.01 dBu
-20°	0.189	0.009	-20.49	150.12 m	195.89 m	100.59 dBu	201.74 m	100.33 dBu
-25°	0.186	0.009	-20.63	147.73 m	158.54 m	102.29 dBu	163.27 m	102.03 dBu
-30°	0.060	0.001	-30.46	47.66 m	134.00 m	93.92 dBu	138.00 m	93.66 dBu
-35°	0.067	0.001	-29.50	53.22 m	116.81 m	96.07 dBu	120.30 m	95.82 dBu
-40°	0.120	0.004	-24.44	95.31 m	104.23 m	102.12 dBu	107.34 m	101.87 dBu
-45°	0.091	0.002	-26.84	72.28 m	94.75 m	100.55 dBu	97.58 m	100.29 dBu
-50°	0.030	0.000	-36.48	23.83 m	87.46 m	91.61 dBu	90.07 m	91.35 dBu
-55°	0.015	0.000	-42.50	11.91 m	81.79 m	86.17 dBu	84.23 m	85.91 dBu
-60°	0.028	0.000	-37.08	22.24 m	77.36 m	92.07 dBu	79.67 m	91.82 dBu
-65°	0.024	0.000	-38.42	19.06 m	73.93 m	91.13 dBu	76.13 m	90.87 dBu
-70°	0.014	0.000	-43.10	11.12 m	71.30 m	86.76 dBu	73.43 m	86.50 dBu
-75°	0.010	0.000	-46.02	7.94 m	69.36 m	84.08 dBu	71.43 m	83.82 dBu
-80°	0.010	0.000	-46.02	7.94 m	68.03 m	84.24 dBu	70.06 m	83.99 dBu
-85°	0.010	0.000	-46.02	7.94 m	67.26 m	84.34 dBu	69.26 m	84.09 dBu
-90°	0.010	0.000	-46.02	7.94 m	67.00 m	84.38 dBu	69.00 m	84.12 dBu

Figure 4. Image of Proposed Support Tower

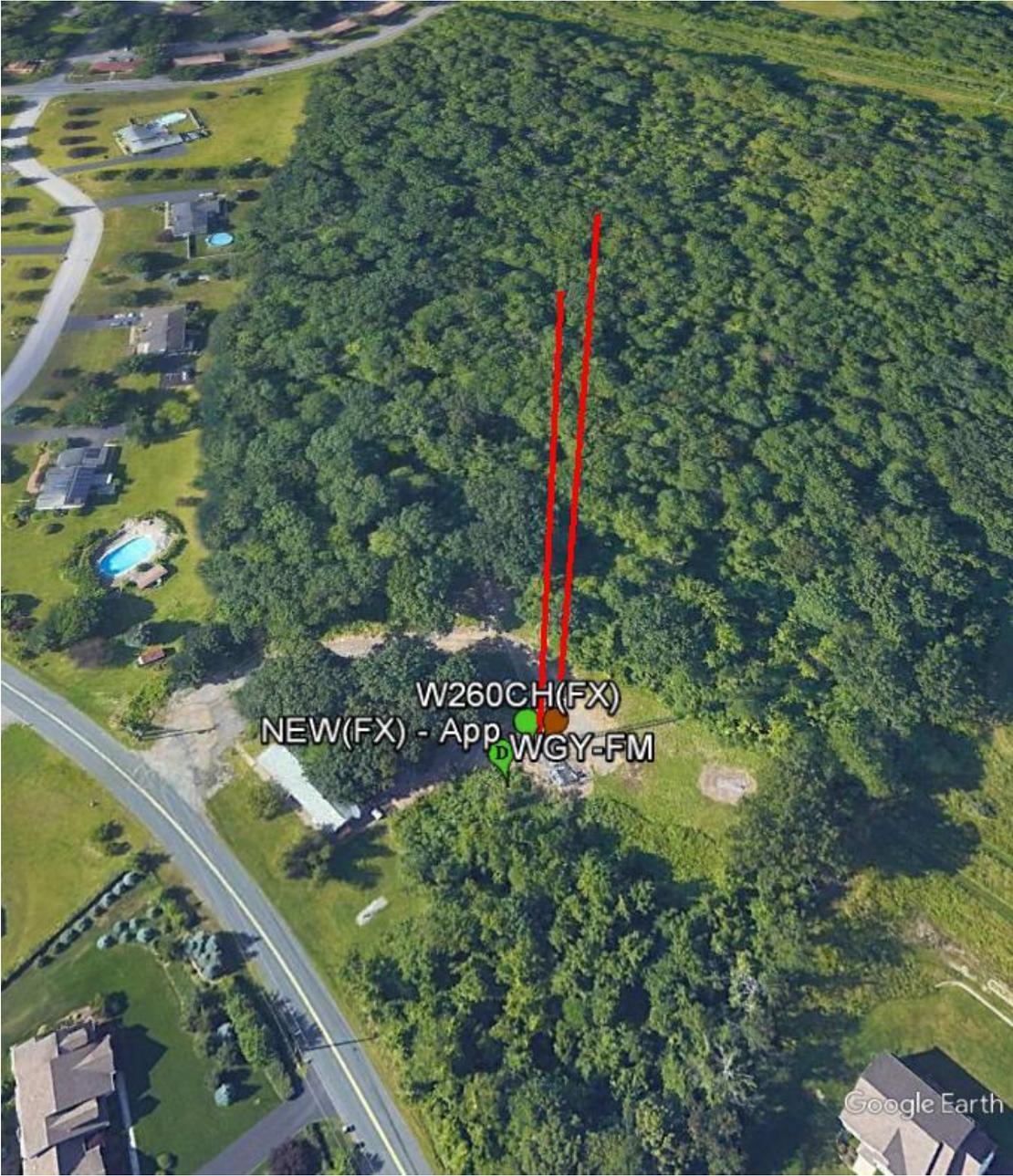


Figure 5. Fill-in and Minor Change Contour Map

