

W221CG APPLICATION FOR MINOR CHANGE

This technical report has been developed in support of an application for a minor modification to FM translator W221CG's CP (BMPFT-20110126ABD) requesting a change in channel to second adjacent channel 223, change ERP to 120 Watts, a decrease in HAAT and a change in antenna.

Allocations analysis:

Allocation exhibits are provided as required by FCC form 349 as follows:

- E1 Interference channel study on requested channel 223**
- E1A Interference study to WZGC on second adjacent channel**
- E1B Aerial map**
- E2 60 dBu plots**
- E2A 60 dBu overlap plot**
- E3 HAAT tabulation**
- E4 ASR**

Exhibit E1 demonstrates clearance to all facilities with the exception of second adjacent channel WZGC which is addressed below. Exhibit E2 shows that the proposed 60 dBu is contained within the primary station's 60 dBu, and E2A demonstrates overlap between the proposed 60 dBu and the licensed W221CG 60 dBu. The FCC 30 second terrain database provided by V-Soft Communications has been used throughout this study.

The proposed W221CG channel 223 facility will be located inside the WZGC second adjacent channel's 60 dBu contour. Therefore, an interference analysis has been conducted based on the D/U ratio of +40 dB at the proposed site. The WZGC contour at that site is 79.655 dBu and the proposed interference contour of 119.655 dBu (50,10) is at a distance of 80 meters which will not reach any buildings or major highways. An aerial photograph is included as E1E demonstrating that the closest house is 90 meters away. Consequently, based on this showing that the interfering contour will not reach a populated area, a waiver of Section 74.1204 is requested.

Proposed site, antenna and RF calculation:

The RF contribution for the proposed facility at ASR#1018983 has been calculated to be 1.4 μ Watts/cm² at 36 meters using the Commission's FMMODEL

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program for a Shively 6812B-1 one bay circularly polarized antenna. This is 0.7% of of the maximum permissible 200 micro-Watts/cm² exposure for general population/uncontrolled exposure and less than the 5% of that level that is excluded from consideration.



Charles M. Anderson March 23, 2011
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E1 CHANNEL STUDY

REFERENCE
33 49 19.0 N.
84 40 49.0 W.

CH# 223D - 92.5 MHz, Pwr= 0.12 kw, HAAT= 33.4 M, COR= 324 M
Average Protected F(50-50)= 6.19 km
Omni-directional

DISPLAY DATES
DATA 03-23-11
SEARCH 03-23-11

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
222D Lithia Springs	W221CG	CP	DV_	0.0 0.0	0.0 BMPFT20110126ABD	33 49 19.0 84 40 49.0	0.250 51	2.9 340	2.1 Cumulus Licensing Llc	-8.8*	-10.5*
221D Kennesaw	W221CG	LIC	_V_	300.2 120.1	12.5 BLFT20100125AIL	33 52 43.0 84 47 52.0	0.038 36	0.4 341	6.5 Cumulus Licensing Llc	6.2	5.3
225C1 Atlanta	WZGC	LIC	NC_	92.9 273.1	31.6 BMLH20080226ABQ	33 48 26.0 84 20 21.8	66.000 340	9.8 612	72.2 Cbs Radio Inc. Of Atlanta	14.6	-41.4*(1)
223C3 Zebulon	WEKS	LIC	_CX	169.2 349.3	77.1 BLH20060714AAC	33 08 20.0 84 31 31.0	12.000 145	103.3 380	37.5 Legacy Media - South Atlan	-32.7*	17.2
220A Atlanta	WCLK	CP	NCX	107.8 287.9	26.5 BPED20081024ABB	33 44 56.0 84 24 27.0	2.500 94	2.2 372	23.3 Clark Atlanta University	17.0	2.4
220A Atlanta	WCLK	LIC	ZC_	107.8 287.9	26.5 BLED20010712ACT	33 44 56.0 84 24 26.0	6.000 94	2.2 372	23.3 Clark Atlanta University	17.0	2.4
222D Marietta	W222AF	LIC	_CN	33.2 213.3	20.8 BLFT19970707TI	33 58 41.0 84 33 25.0	0.010 130	9.9 433	7.0 Immanuel Broadcasting Netw	4.0	3.9
222D Marietta	W222AF	APP	DV_	60.2 240.3	21.0 BPFT20110310AAP	33 54 56.5 84 28 57.5	0.015 84	5.6 379	3.9 Immanuel Broadcasting Netw	9.0	7.9
277C0 Atlanta	WVEE	LIC	_C_	102.2 282.4	32.8 BMLH20080222ADZ	33 45 33.0 84 20 05.0	100.000 310	87.5 594	73.6 Cbs Radio East Inc.	24.5R	8.3M
221A Carrollton	WBTR-FM	LIC	_CN	227.6 47.4	42.3 BLH19861029KC	33 33 54.0 85 01 02.0	0.580 194	1.6 498	20.9 Wyai, Inc.	34.8	20.6
222C0 Chattanooga	WDEF-FM	LIC	_C_	338.2 157.8	157.2 BMLH20050831ADG	35 08 06.0 85 19 25.0	100.000 360	130.5 743	87.3 Jackson Telecasters, Inc.	21.1	61.7
221D Lilburn	W221AZ	LIC	DCN	82.7 263.0	47.1 BLFT19950802TO	33 52 28.0 84 10 26.0	0.027 82	0.1 372	3.3 Toccoa Falls College	39.0	43.1
221D North Canton	W221AW	LIC	_C_	15.8 195.9	52.2 BLFT20050420ABJ	34 16 26.0 84 31 32.0	0.010 272	0.2 602	10.4 Immanuel Broadcasting Netw	44.8	41.1
223C Greenville	WESC-FM	LIC	_CY	51.8 233.0	239.8 BLH19800811AB	35 08 16.0 82 36 31.0	100.000 610	186.3 1274	82.8 Clear Channel Broadcasting	47.5	137.3

Terrain database is USGS 03 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 adjacent.
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 protected contour.

(1) See interference calculation in Technical Report.

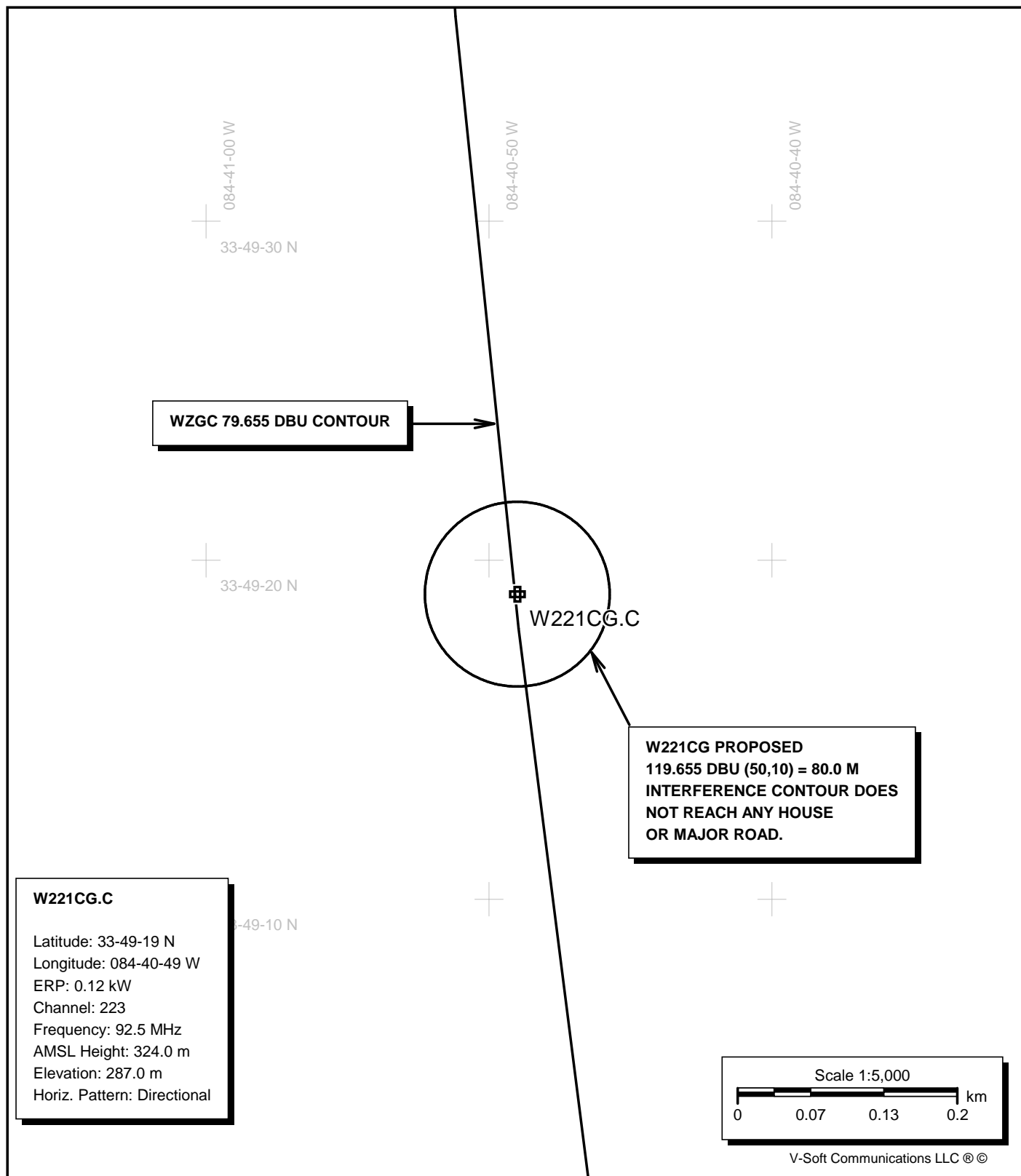


EXHIBIT E1B

221CG PROPOSED CHANNEL 223 INTERFERENCE CONTOUR



**EXHIBIT E1B
AERIAL MAP OF SITE
SHOWING
CLEARANCE TO
NEAREST HOUSE**

Imagery ©2011 DigitalGlobe, USDA Farm Service Agency, GeoEye, U.S. Geological Survey -

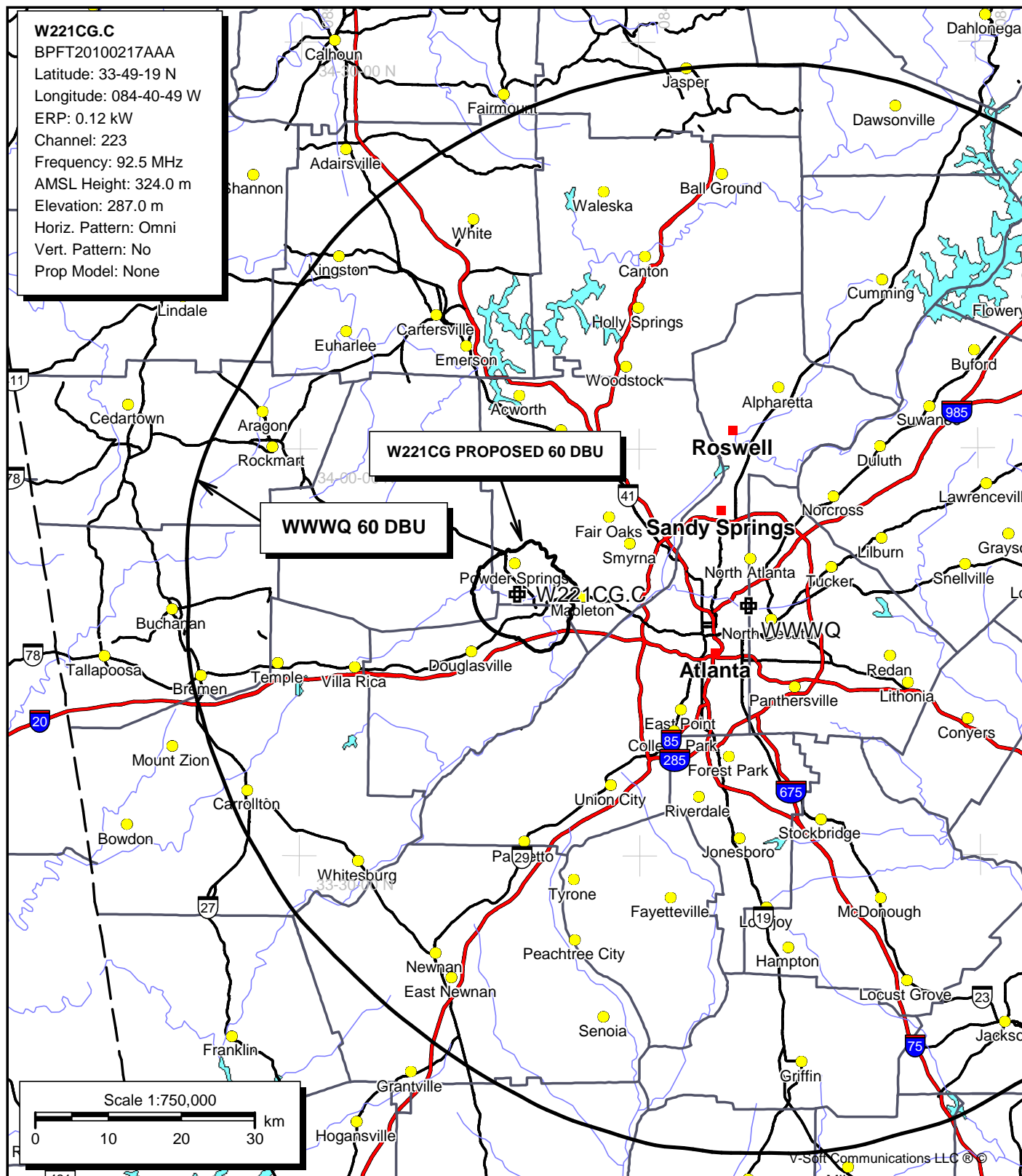


EXHIBIT E2

221CG PROPOSED AND WWWQ 60 DBU CONTOURS OVERLAP

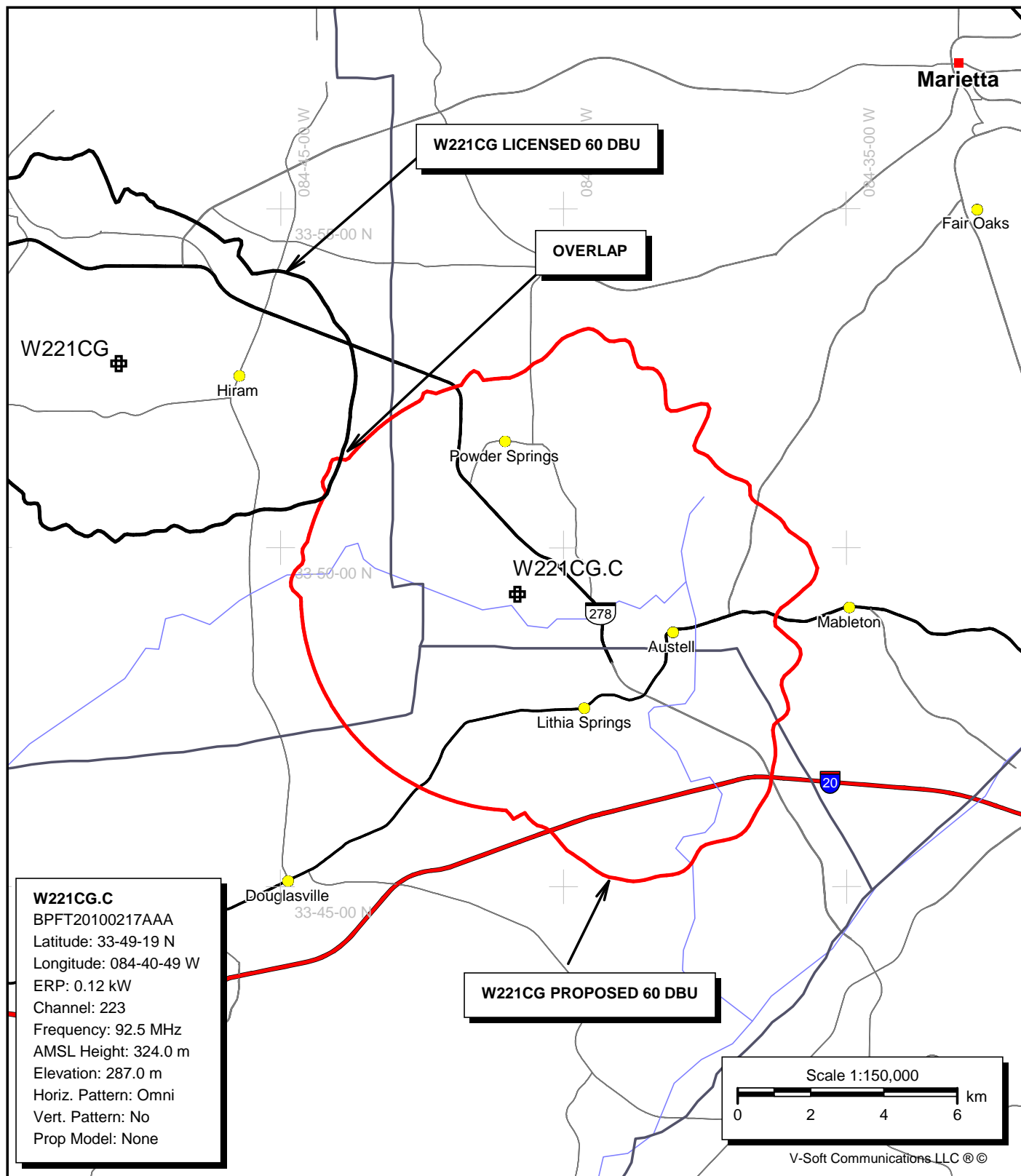


EXHIBIT E2A

221CG PROPOSED AND LICENSED 60 DBU CONTOURS OVERLAP

E3 CONTOUR AND HAAT TABULATION

N. Lat. = 334919.0 W. Lng. = 844049.0
HAAT and Distance to Contour,
V-Soft 3-16 km, 131 pts Method - FCC 30 SEC

Azi.	AV EL	HAAT	dBk	60-F5
000	293.0	31.0	-33.94	1.61
030	279.7	44.3	-33.94	1.78
060	286.1	37.9	-22.60	3.04
090	273.2	50.8	-12.32	6.40
120	268.0	56.0	-9.37	8.01
150	258.3	65.7	-9.94	8.39
180	292.0	32.0	-12.16	5.12
210	335.8	-11.8	-12.09	4.98
240	294.2	29.8	-9.37	5.84
270	292.8	31.2	-9.94	5.76
300	291.3	32.7	-14.29	4.54
330	296.6	27.4	-31.37	1.67

Ave El= 288.42 M HAAT= 35.58 M AMSL= 324 M

ASR Registration Search

Registration 1018983 [Map Registration](#)**Registration Detail**

Reg Number	1018983	Status	Constructed
File Number	A0710196	Constructed	09/18/1992
FAA Study	2010-ASO-6308-OE	EMI	No
FAA Issue Date	12/30/2010	NEPA	No

Antenna Structure

Structure Type MAST - Mast

Location (in NAD83 Coordinates)

Lat/Long 33-49-19.4 N 084-40-48.8 W 5300 HIRAM-LITHIA SPRINGS RD SW

City, State POWDER SPRINGS , GA

Center of
AM Array**Heights (meters)**

Elevation of Site Above Mean Sea Level	Overall Height Above Ground (AGL)
286.8	80.5
Overall Height Above Mean Sea Level	Overall Height Above Ground w/o Appurtenances
367.3	76.2

Painting and Lighting Specifications

FAA Chapters 4, 8, 12

Paint and Light in Accordance with FAA Circular Number 70/7460-1K

Owner & Contact Information

FRN	0003800307	Licensee ID	L00270093
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Owner

Verizon Wireless (VAW) LLC
Attention To: Regulatory
1120 Sanctuary Pkwy, #150 GASA5REG
Alpharetta , GA 30009-7630

P: (770)797-1070
E: Network.Regulatory@VerizonWireless.com

Contact

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Last Action Status

Status	Constructed	Received	01/05/2011
Purpose	Notification	Entered	01/05/2011
Mode	Interactive		

Related Applications

01/05/2011	A0710195 - Modification (MD)
01/05/2011	A0710196 - Notification (NT)
12/05/2006	A0529793 - Admin Update (AU)
	Related applications (11)