

Exhibit 17 - Statement A
ALLOCATION CONSIDERATIONS
 prepared for
Radio Communications Board,
Georgia Institute of Technology
 WREK(FM) Atlanta, Georgia
 Facility ID 54536
 Ch. 216C1 100 kW (MAX-DA) 102 m

Radio Communications Board, Georgia Institute of Technology (“Georgia Tech”), licensee of WREK(FM), herein proposes to amend its Construction Permit¹ to show minor changes in the height and pattern of the proposed directional antenna system. The proposed changes were prompted by the WAYU(FM)(Ch. 216A Steele, AL) changes in antenna system and effective radiated power (“ERP”).²

Georgia Tech proposes to utilize a circularly polarized directional FM antenna located 102 meters above average terrain with a maximum ERP of 100 kW. The proposed antenna will be side-mounted on an existing tower structure³. No change in the overall tower height or marking and lighting requirements will result from the instant proposal. As shown in **Exhibit 17 - Figure 1**, the principal community of Atlanta will be encompassed by the proposed facility’s 60 dBμ contour.

An allocations study revealed the following potentially affected co-channel, adjacent-channel, and intermediate-frequency channel facilities:

Call	Channel	Location	Azi	Dist	FCC
WJTG	LIC 217C1	Fort Valley	GA 157.2	130.8	157.5
WRAF	LIC-D 215C1	Toccoa Falls	GA 46.1	132.3	157.5
WCGN	CP -D 217C3	Calhoun	GA 330.3	94.4	116.5
WMVV	LIC-D 214C2	Griffin	GA 150.8	51.9	57.5
NEW	CP -D 216C2	Mccormick	SC 89.6	184.9	189.5
WWEV-FM	LIC-D 218C2	Cumming	GA 23.9	55.7	57.5
WAYU	LIC 216A	Steele	AL 277.3	168.7	165.5
WTSE	LIC-D 216C3	Benton	TN 3.3	171.7	176.5
WOAK	LIC 215A	La Grange	GA 210.9	105.0	105.5
WEGL	LIC 216A	Auburn	AL 217.9	164.7	165.5
WCCV	LIC-D 219C2	Cartersville	GA 306.3	72.0	57.5

¹ See BPED-20070907AFB.

² WAYU originally proposed an ERP of 470 Watts (Max-DA) but has since licensed a facility with only 150 Watts at the same location. See File Numbers BNPED-20071015AKF and BLED-20101105AAW.

³ See FCC Antenna Structure Registration Number 1028279.

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As shown in **Exhibit 17 – Figures 2 – 4** and detailed-views **Exhibit 17 – Figures 2A, 2B, 3A, 3B and 3C**, there would be no prohibited contour overlap these facilities.

The contours were plotted using the actual ERP and height above terrain along each radial for each facility, as specified in §73.509(c). For the facilities under study, the antenna elevation above mean sea level, geographic coordinates, and ERP (including directional antenna relative field values, where appropriate) were retrieved from the FCC’s engineering database. The requisite contours were determined using U.S.G.S. 30-second digitized terrain data along each radial of interest from each transmitter site and an implementation of the Commission's TVFMFS computer program, which simulates the FM propagation curves.

TV Channel 6 Considerations

Under §73.525(a)(1), an affected TV Channel 6 station must be considered with a proposed non-commercial educational facility on Channel 216 if the distance between the respective transmitter sites is 177 km or less. A search of the Media Bureau’s engineering database revealed no domestic, full-service Channel 6 facilities within that distance.

There are a series of low-power television stations or translator stations operating or proposed within 177 km of the proposed facility. It is believed that these stations are not protected from interference from NCE FM facilities. Accordingly, the instant proposal complies with the television Channel 6 protection criteria of §73.525.

Other Coordination Considerations

The proposed site is located 890 km from the U.S. – Canadian border, which is well beyond the “border area” specified in the Canadian Agreement.⁴ Therefore, international coordination is not believed to be a factor in this case.

⁴ *Agreement between the Government of Canada and the Government of the United States of America Relating to the FM Broadcasting Service and the Associated Working Arrangement*, publication date June 1997.

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FCC Monitoring Stations and Other Broadcast Facilities

The nearest FCC monitoring station is located at a distance of 30.9 km from Powder Springs, GA. The proposed directional antenna proposes a slight increase in power along the radial to the monitoring station. Because the proposed increase in field strength is slight and the 4.1 mV/m predicted⁵ WREK field strength at the monitoring station is significantly less than the 10 mV/m guidance provided in §73.1030(c)(1),⁶ *Georgia Tech* has not consulted with the FCC Chief, Compliance and Information Bureau. However, if deemed necessary, any necessary coordination is respectfully requested. The proposed site is also located outside bounds of the coordination distances specified in §73.1030(a)(1) and 73.1030(b)(1). Thus, notification of the instant proposal to the National Radio Astronomy Observatory at Green Bank, West Virginia or Table Mountain, Colorado, is not required. The proposed facility is not located within 3.2 km of any AM broadcast facility.

It is thus believed that the facility proposed herein will satisfy all of the pertinent Commission Rules and Policies now in effect regarding allocation matters.

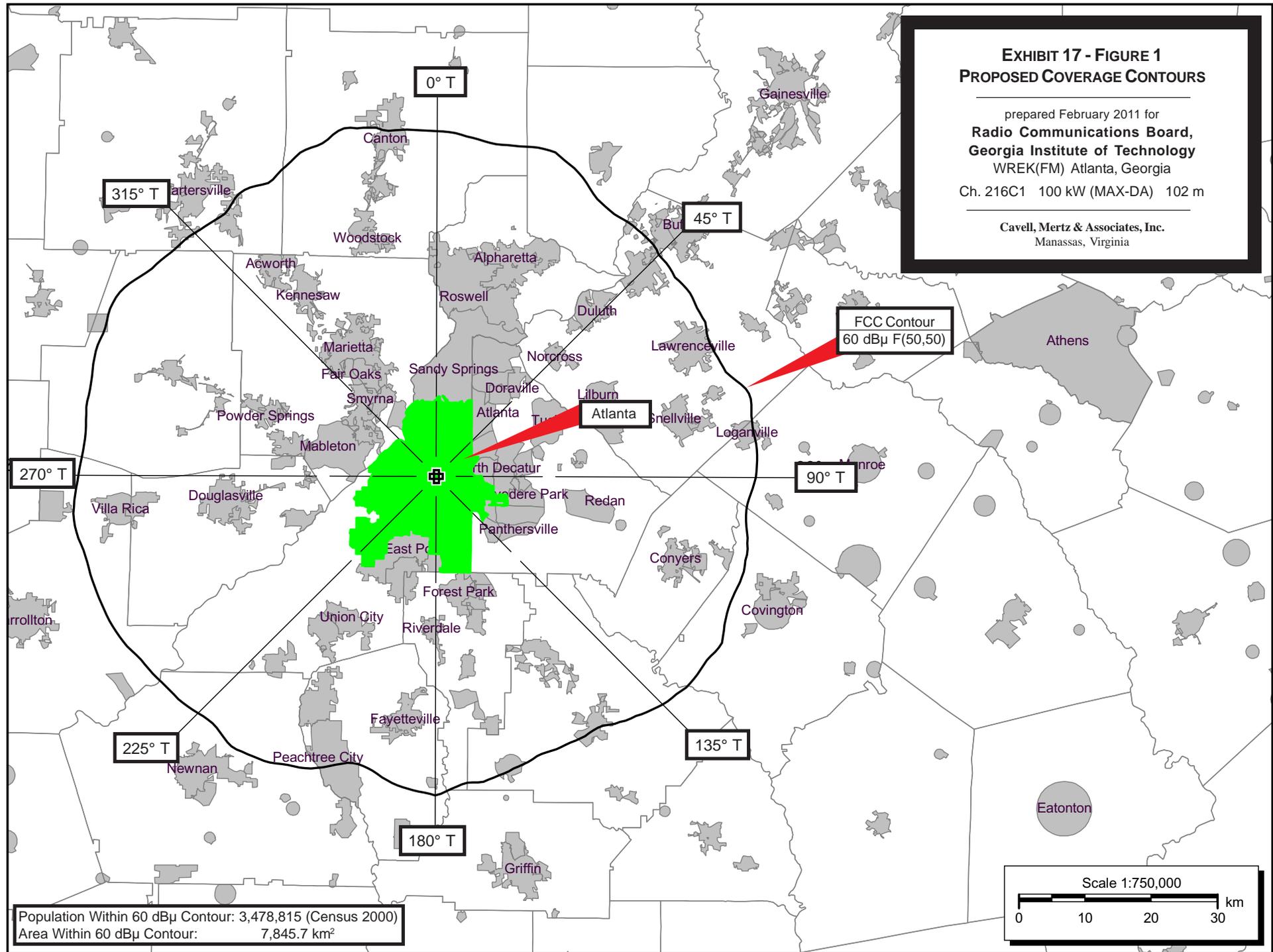
⁵ This field strength was determined using the F(50,50) FCC Contour Method.

⁶ The locations of the Powder Springs FCC Monitoring Station and the proposed 10 mV/m F(50,50) contour is provided as **Exhibit 17 – Figure 5**.

**EXHIBIT 17 - FIGURE 1
PROPOSED COVERAGE CONTOURS**

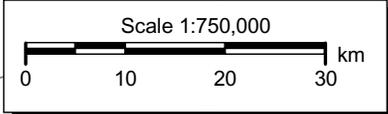
prepared February 2011 for
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 Ch. 216C1 100 kW (MAX-DA) 102 m

Cavell, Mertz & Associates, Inc.
 Manassas, Virginia



FCC Contour
 60 dBu F(50,50)

Population Within 60 dBu Contour: 3,478,815 (Census 2000)
 Area Within 60 dBu Contour: 7,845.7 km²



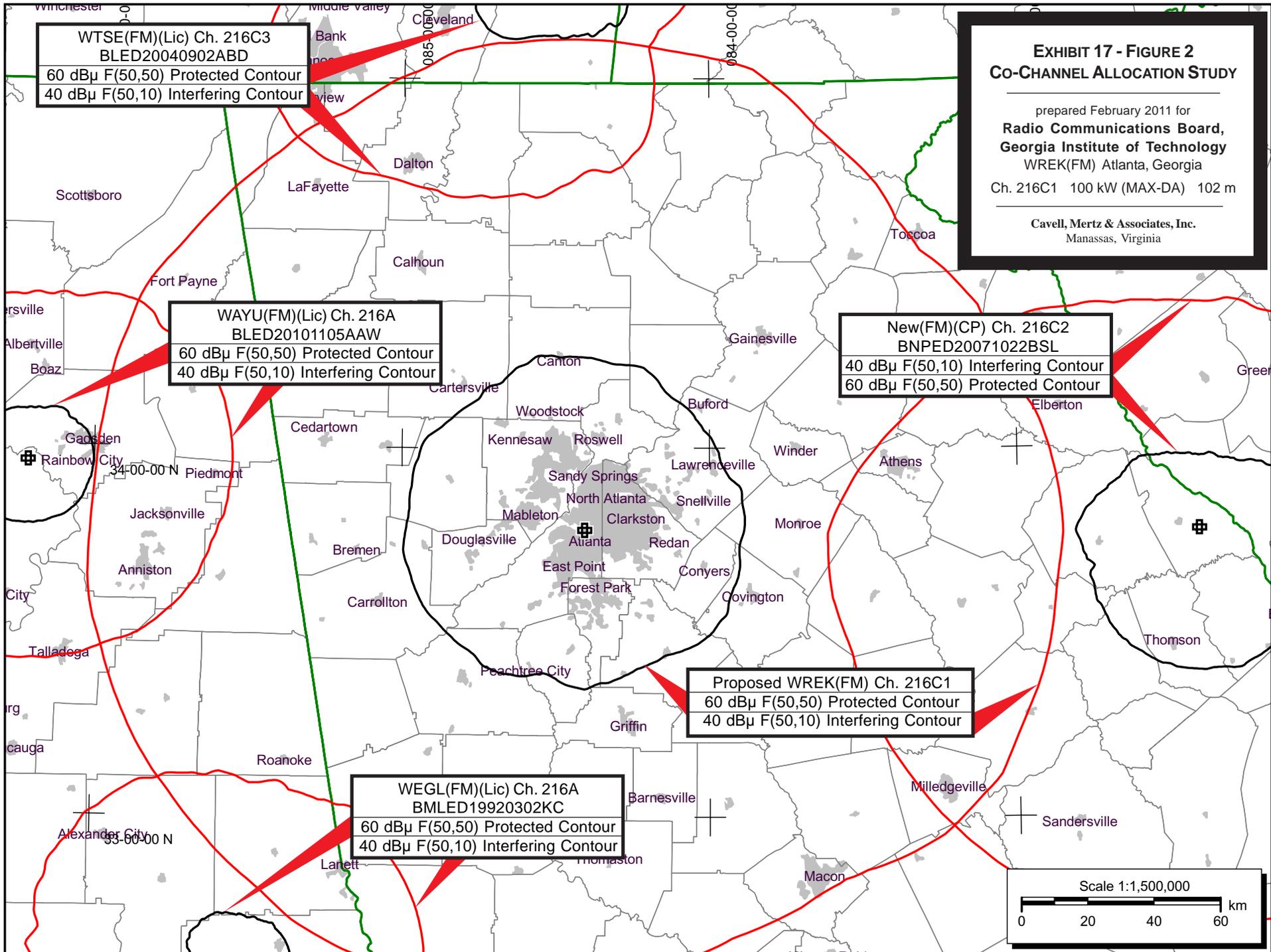


EXHIBIT 17 - FIGURE 2A
DETAILED Co-CHANNEL ALLOCATION STUDY

prepared February 2011 for
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WREK(FM) Atlanta, Georgia
Ch. 216C1 100 kW (MAX-DA) 102 m

Cavell, Mertz & Associates, Inc.
Manassas, Virginia

WAYU(FM)(Lic) Ch. 216A
BLED20101105AAW
60 dB μ F(50,50) Protected Contour

086-00-00 W

Glencoe
34-00-00 N

Proposed WREK(FM) Ch. 216C1
40 dB μ F(50,10) Interfering Contour

Scale 1:250,000

0 3 6 9 km

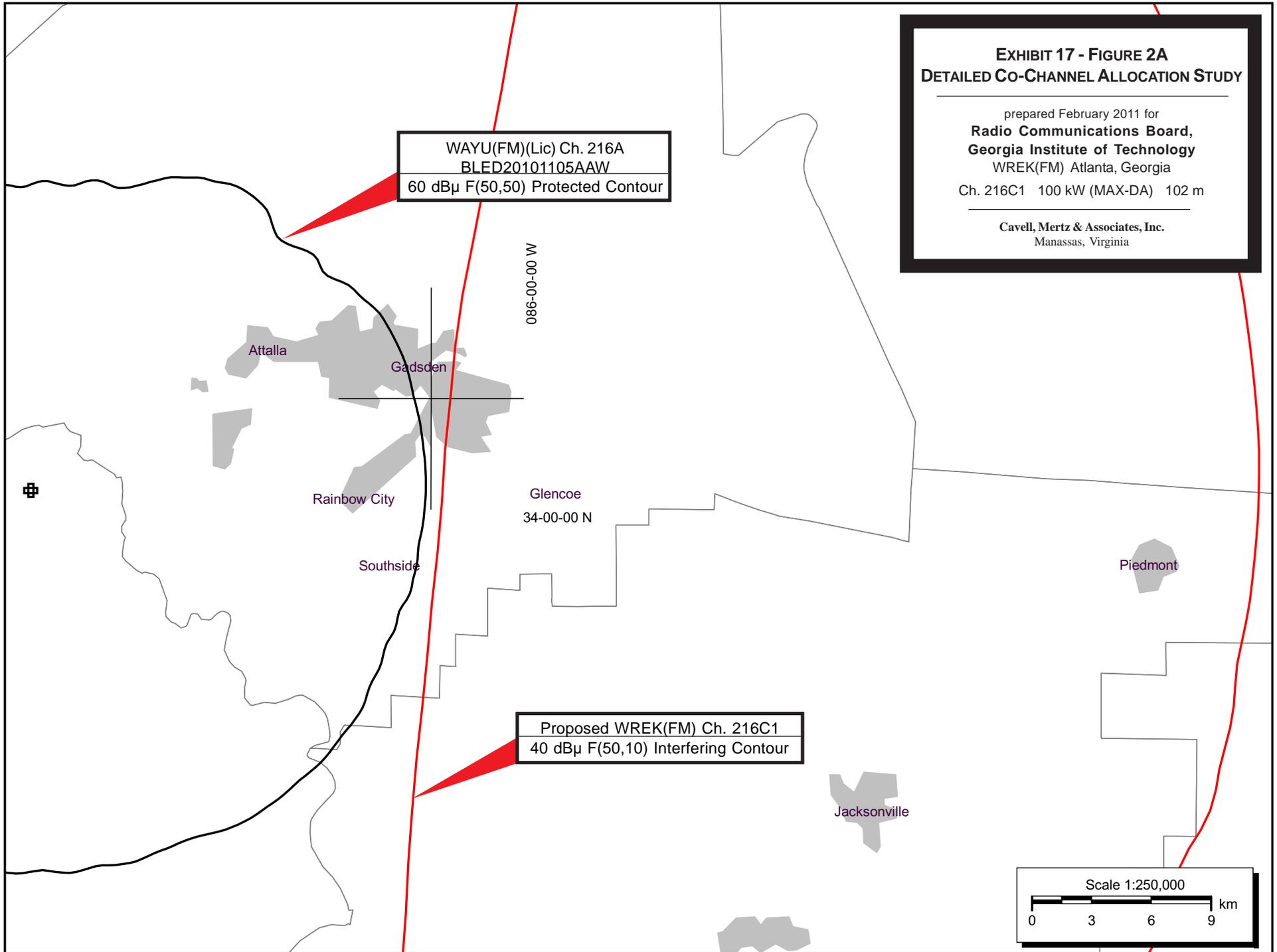


EXHIBIT 17 - FIGURE 2B
DETAILED CO-CHANNEL ALLOCATION STUDY

prepared February 2011 for
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Ch. 216C1 100 kW (MAX-DA) 102 m

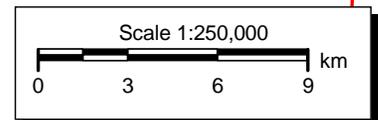
Cavell, Mertz & Associates, Inc.
Manassas, Virginia

WTSE(FM)(Lic) Ch. 216C3
BLED20040902ABD
60 dB μ F(50,50) Protected Contour

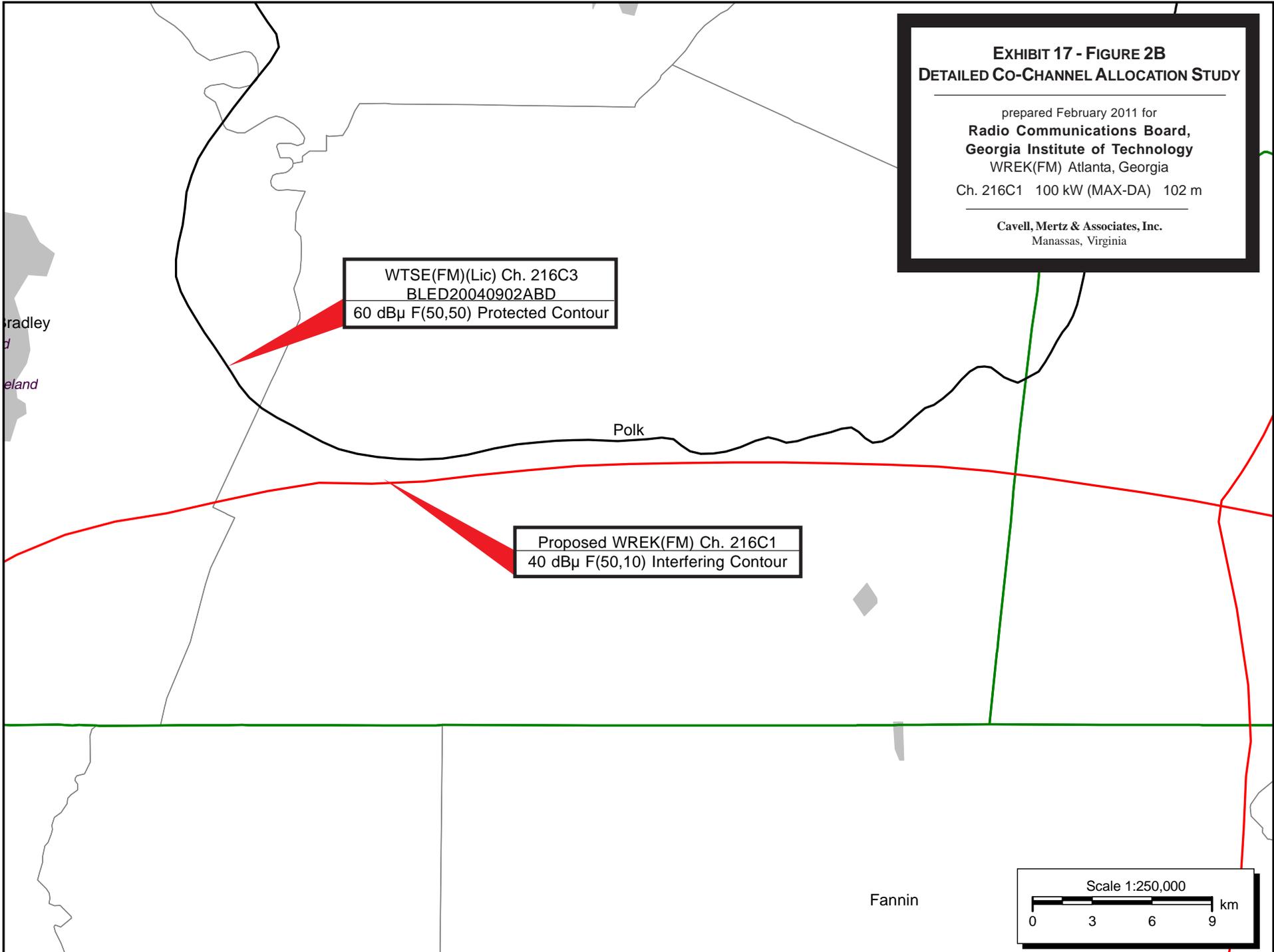
Proposed WREK(FM) Ch. 216C1
40 dB μ F(50,10) Interfering Contour

Polk

Fannin



Bradley
d
eland



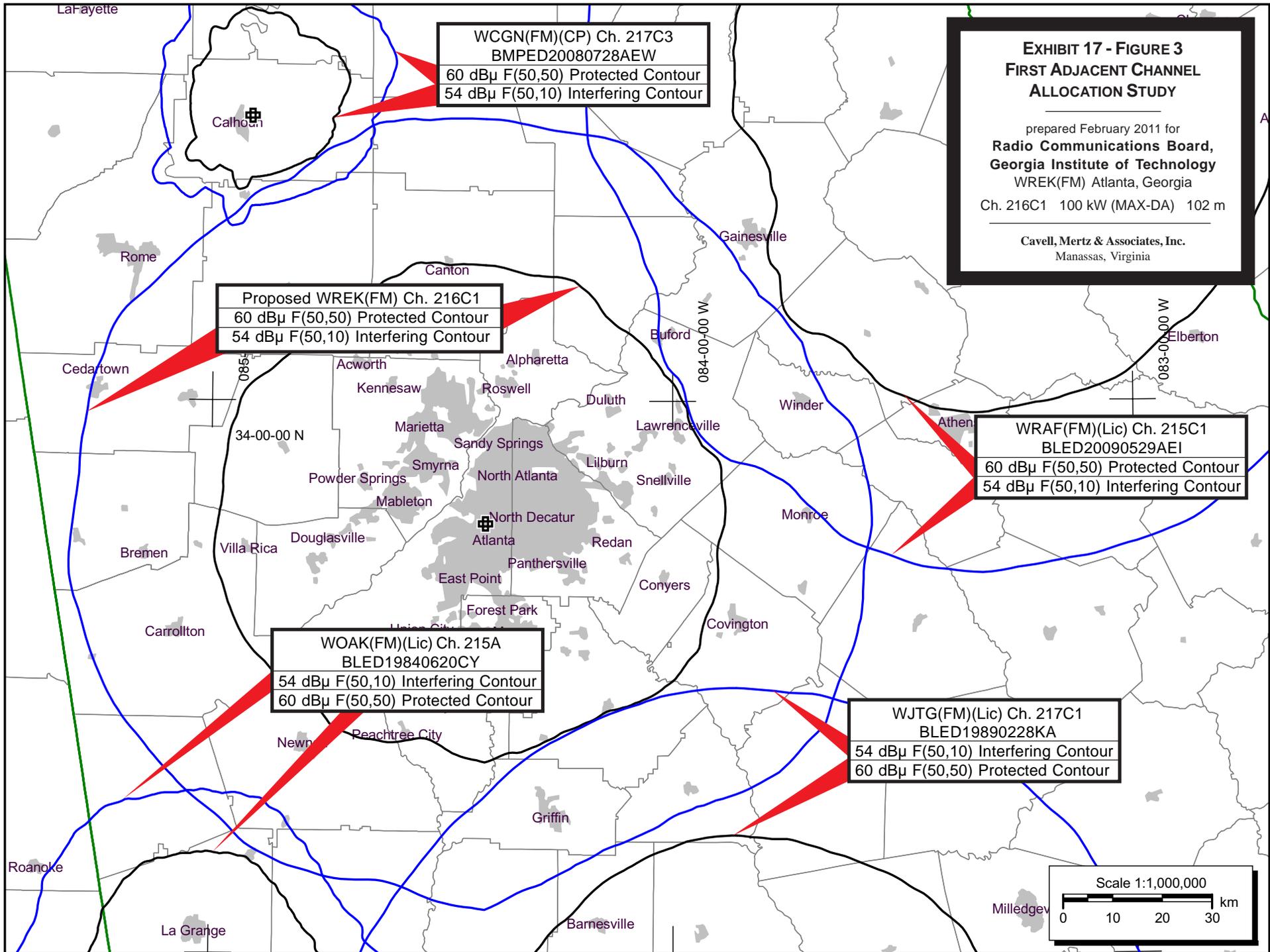


EXHIBIT 17 - FIGURE 3
FIRST ADJACENT CHANNEL
ALLOCATION STUDY

prepared February 2011 for
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 Ch. 216C1 100 kW (MAX-DA) 102 m

Cavell, Mertz & Associates, Inc.
 Manassas, Virginia

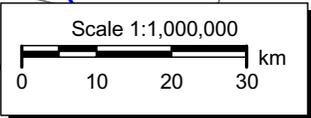
Proposed WREK(FM) Ch. 216C1
 60 dBu F(50,50) Protected Contour
 54 dBu F(50,10) Interfering Contour

WGN(FM)(CP) Ch. 217C3
 BMPED20080728AEW
 60 dBu F(50,50) Protected Contour
 54 dBu F(50,10) Interfering Contour

WRAF(FM)(Lic) Ch. 215C1
 BLED20090529AEI
 60 dBu F(50,50) Protected Contour
 54 dBu F(50,10) Interfering Contour

WOAK(FM)(Lic) Ch. 215A
 BLED19840620CY
 54 dBu F(50,10) Interfering Contour
 60 dBu F(50,50) Protected Contour

WJTG(FM)(Lic) Ch. 217C1
 BLED19890228KA
 54 dBu F(50,10) Interfering Contour
 60 dBu F(50,50) Protected Contour



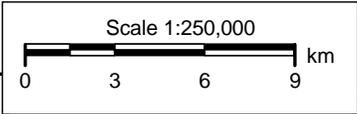
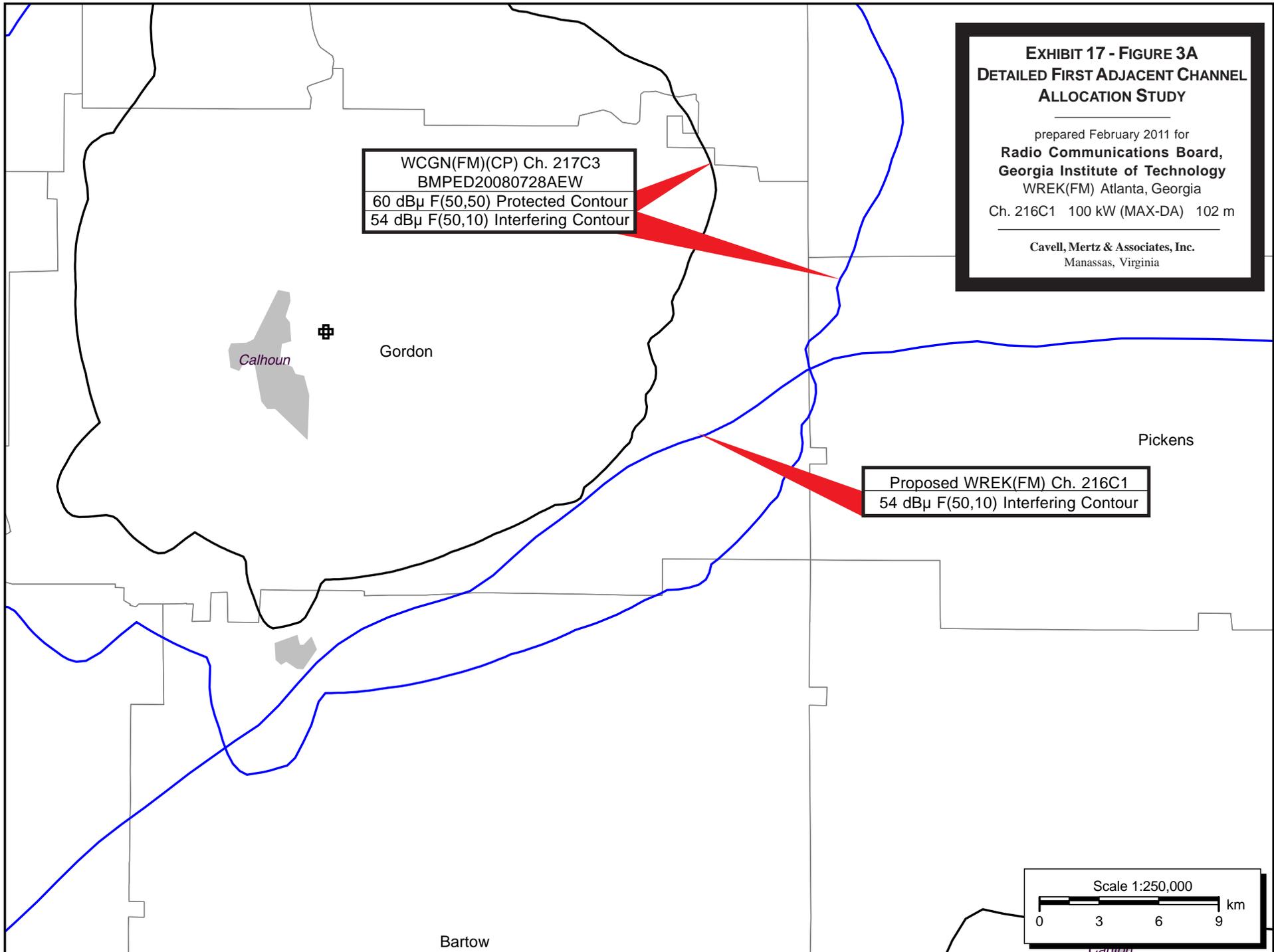
**EXHIBIT 17 - FIGURE 3A
DETAILED FIRST ADJACENT CHANNEL
ALLOCATION STUDY**

prepared February 2011 for
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Cavell, Mertz & Associates, Inc.
Manassas, Virginia

WCGN(FM)(CP) Ch. 217C3
BMPED20080728AEW
60 dB μ F(50,50) Protected Contour
54 dB μ F(50,10) Interfering Contour

Proposed WREK(FM) Ch. 216C1
54 dB μ F(50,10) Interfering Contour



**EXHIBIT 17 - FIGURE 3B
DETAILED FIRST ADJACENT CHANNEL
ALLOCATION STUDY**

prepared February 2011 for
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Cavell, Mertz & Associates, Inc.
Manassas, Virginia

Proposed WREK(FM) Ch. 216C1
60 dB μ F(50,50) Protected Contour
54 dB μ F(50,10) Interfering Contour

WRAF(FM)(Lic) Ch. 215C1
BLED20090529AEI
60 dB μ F(50,50) Protected Contour
54 dB μ F(50,10) Interfering Contour

084-00-00 W

34-00-00 N

Buford
Sugar Hill

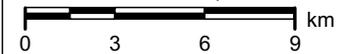
Duluth

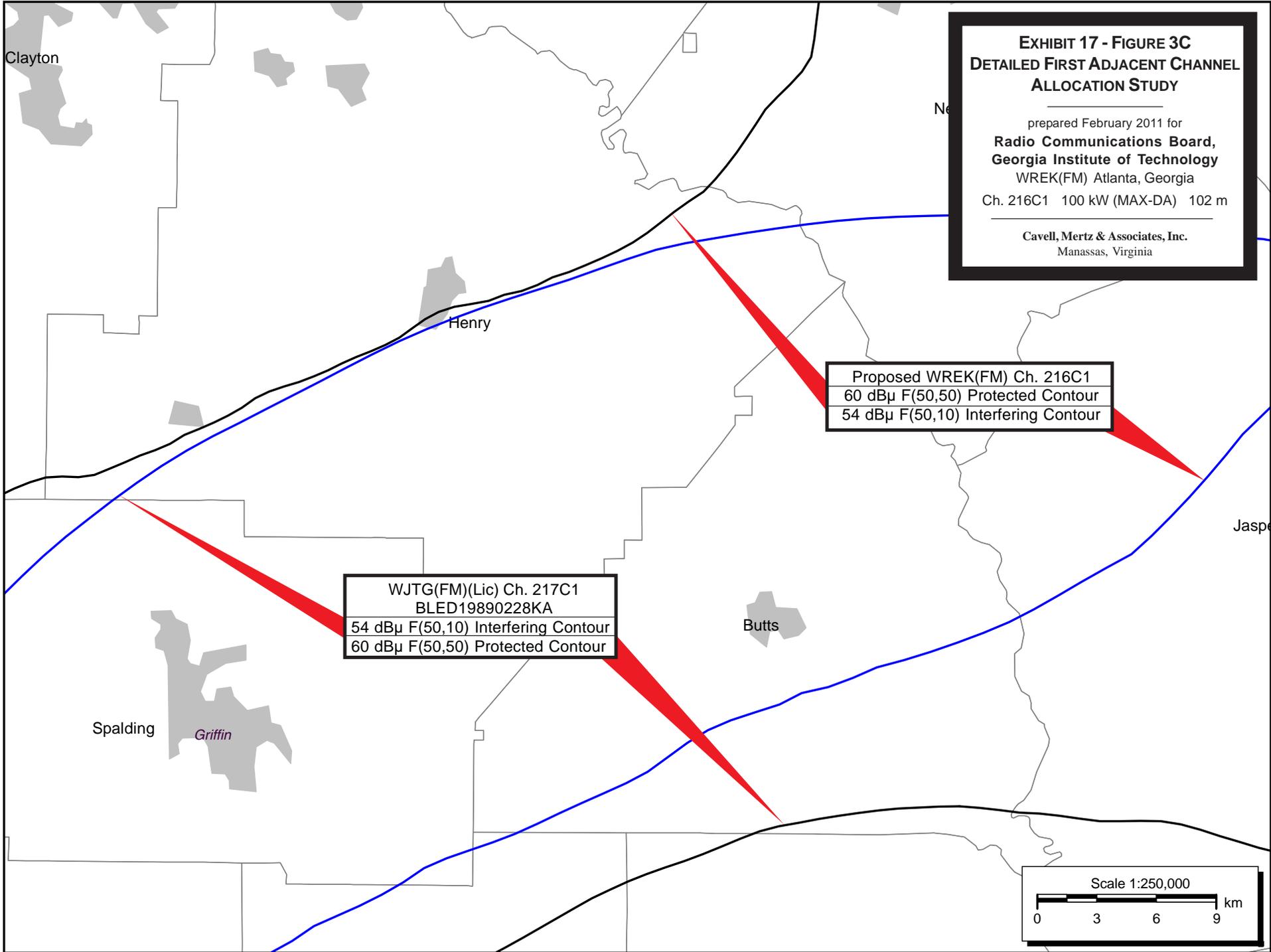
Winder

Lawrenceville

Lilburn

Scale 1:250,000





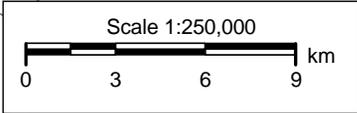
**EXHIBIT 17 - FIGURE 3C
 DETAILED FIRST ADJACENT CHANNEL
 ALLOCATION STUDY**

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Cavell, Mertz & Associates, Inc.
 Manassas, Virginia

Proposed WREK(FM) Ch. 216C1
 60 dBµ F(50,50) Protected Contour
 54 dBµ F(50,10) Interfering Contour

WJTG(FM)(Lic) Ch. 217C1
 BLED19890228KA
 54 dBµ F(50,10) Interfering Contour
 60 dBµ F(50,50) Protected Contour



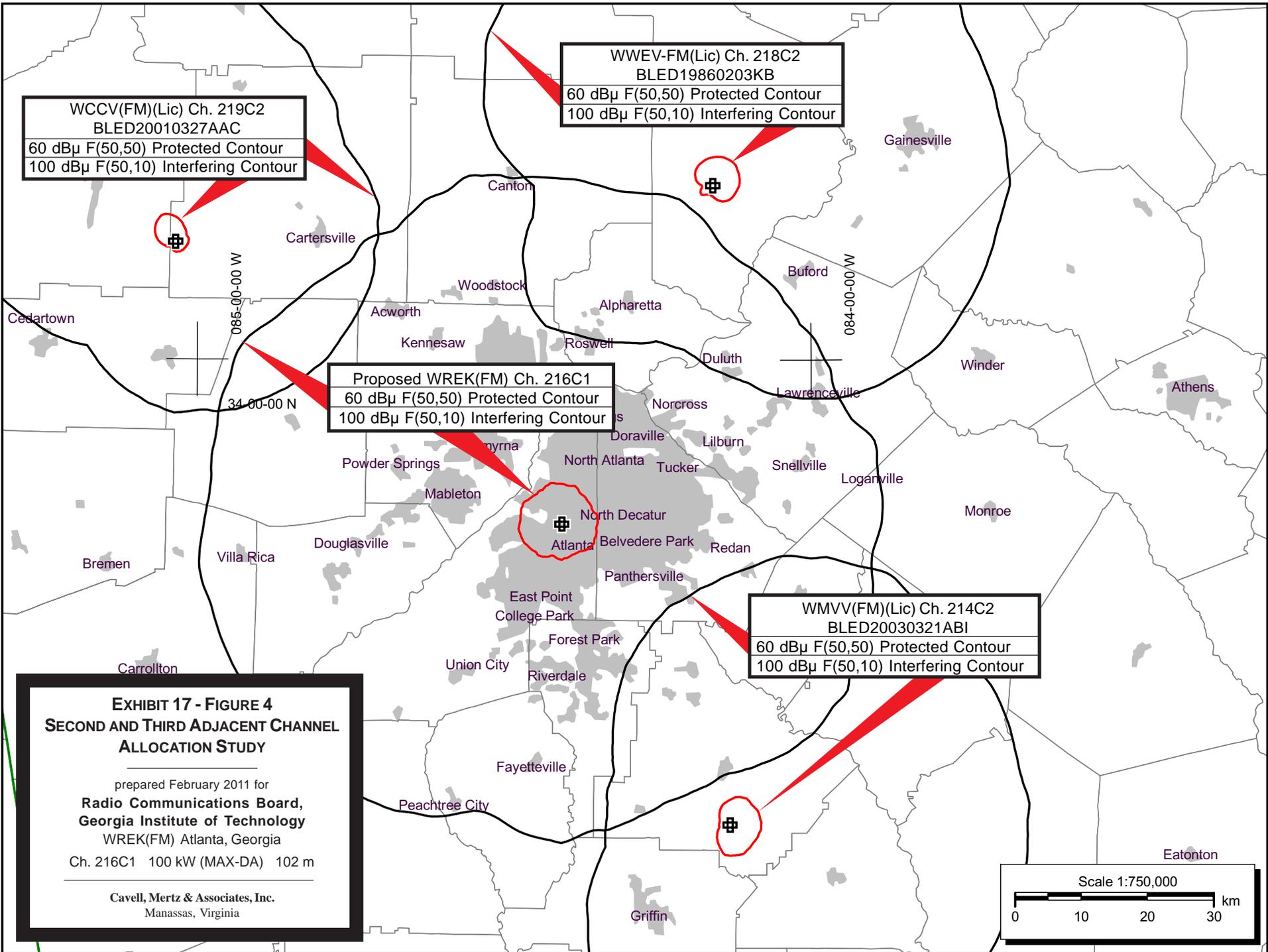
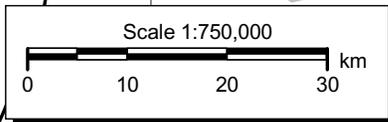
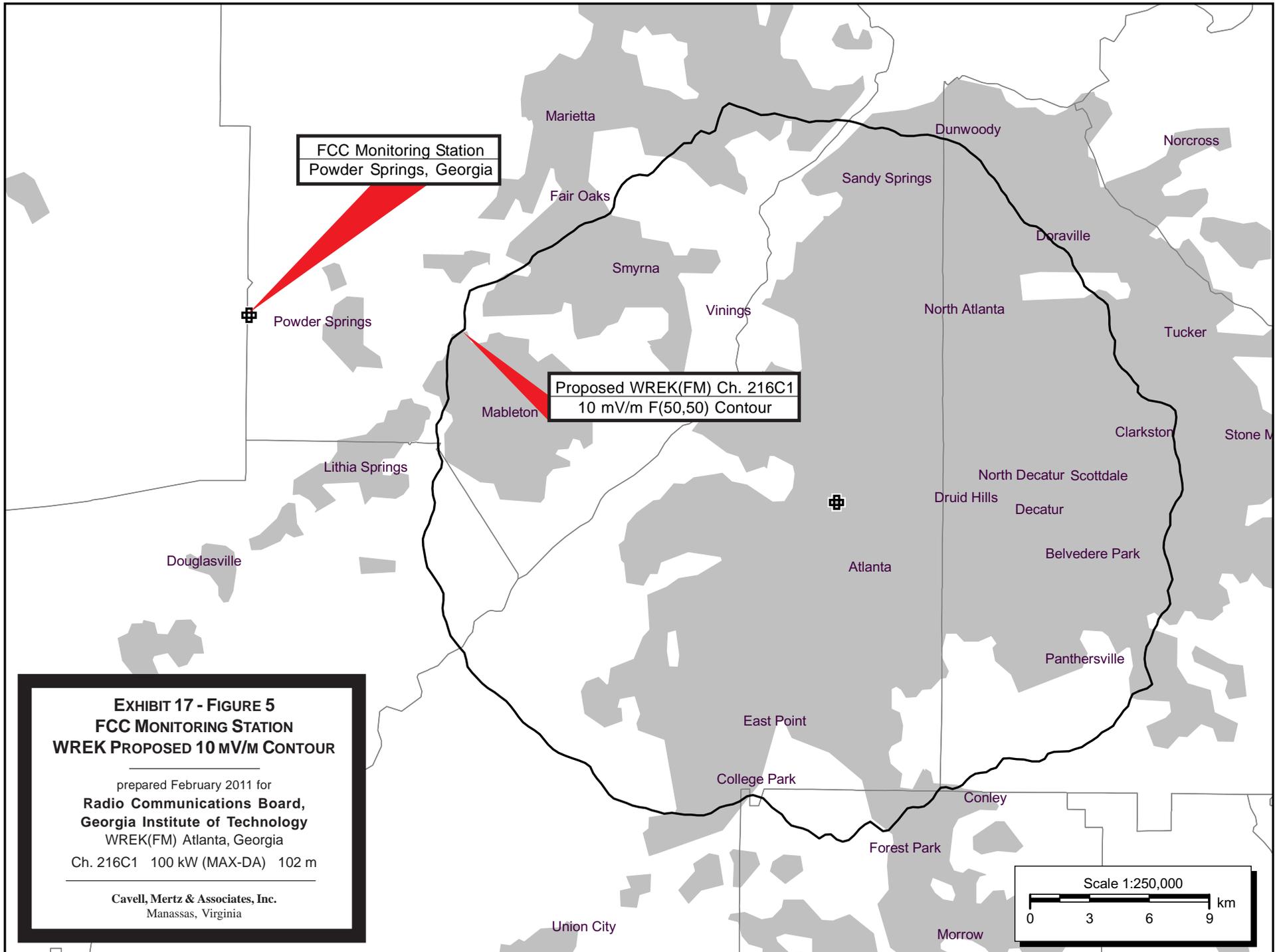


EXHIBIT 17 - FIGURE 4
SECOND AND THIRD ADJACENT CHANNEL
ALLOCATION STUDY

prepared February 2011 for
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 WREK(FM) Atlanta, Georgia
 Ch. 216C1 100 kW (MAX-DA) 102 m

Cavell, Mertz & Associates, Inc.
 Manassas, Virginia





FCC Monitoring Station
Powder Springs, Georgia

Proposed WREK(FM) Ch. 216C1
10 mV/m F(50,50) Contour

EXHIBIT 17 - FIGURE 5
FCC MONITORING STATION
WREK PROPOSED 10 MV/M CONTOUR

prepared February 2011 for
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Cavell, Mertz & Associates, Inc.
 Manassas, Virginia

