

ENGINEERING STATEMENT  
RE REQUEST FOR MODIFICATION OF  
CONSTRUCTION PERMIT  
(FCC FILE NO. BMPCDT-20000501ACC)  
TO OPERATE DTV STATION  
WMYT-DT, ROCK HILL, SOUTH CAROLINA  
CHANNEL 39 225 KW ERP 571 METERS HAAT

MARCH 2008

COHEN, DIPPELL AND EVERIST, P.C.  
CONSULTING ENGINEERS  
RADIO AND TELEVISION  
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington )  
 ) ss  
District of Columbia )

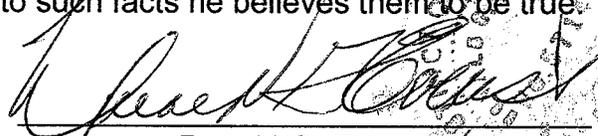
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is President, Secretary and Treasurer of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

That his qualifications are a matter of record in the Federal Communications Commission;

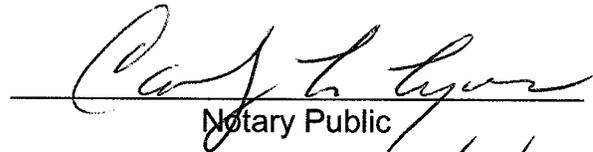
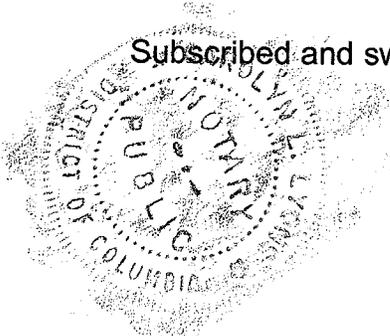
That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



Donald G. Everist  
District of Columbia  
Professional Engineer  
Registration No. 5714

Subscribed and sworn to before me this 14<sup>th</sup> day of March, 2008.



Notary Public

My Commission Expires: 2/28/2013

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington )  
 ) ss  
District of Columbia )

Martin R. Doczkat being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer of the Pennsylvania State University, and is a staff engineer at Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

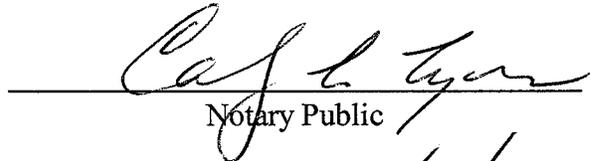
That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

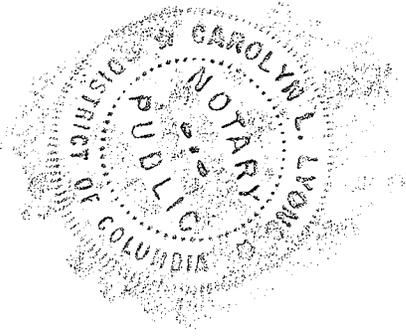


Martin R. Doczkat

Subscribed and sworn to before me this 14<sup>th</sup> day of March, 2008.

  
Notary Public

My Commission Expires: 2/28/2013



### Introduction

This engineering statement has been prepared on behalf of WMYT-TV, Inc. (“WMYT-DT”) licensee of TV station WMYT-TV, Rock Hill, South Carolina, in support of its request to modify the outstanding construction permit (FCC File No. BMPCDT-20000501ACC) for a digital television (“DTV”) operation. At present, WMYT-TV operates on NTSC TV Channel 55 (716-722 MHz) with 5000 kW effective radiated power (“ERP”) and 570 meters antenna height above average terrain (“HAAT”). The current NTSC Channel 55 operation of WMYT-TV is with a non-directional TV antenna. WMYT-DT (formerly WWWB-DT) has been allotted<sup>1</sup> Channel 39 (620-626 MHz) for its digital TV operation and been authorized to construct a facility (FCC File No. BMPCDT-20000501ACC) with a non-directional ERP of 200 kW at 595.3 meters HAAT. WMYT-DT currently operates under Special Temporary Authority (“STA”) (FCC File No. BDSTA-20020515AAW) with 200 kW non-directional ERP and 571 meters HAAT. This modification requests a slight decrease in height from the construction permit authorization to 571 meters HAAT to match the STA and an appropriate increase in ERP to 225 kW to remain within the authorized construction permit. The proposed operation meets the provisions of Paragraph 140 of the Third Periodic Review Report and Order.<sup>2</sup>

### Expedited Processing

An allocation study from the proposed site has not been performed as the predicted F(50,90) 41 dBu contour of the proposed DTV facilities at the currently authorized site fits entirely within the predicted F(50,90) 41 dBu contour of the WMYT-DT facility in Appendix B

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<sup>1</sup>“In the Matter of Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service”, MM Docket 87-268, Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order and Eighth Report and Order (FCC 08-72) Released March 6, 2008.

<sup>2</sup>“In the Matter of Third Periodic Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television”, MB Docket No. 07-91, Report & Order (FCC 07-228), Released December 31, 2007.

of the Memorandum Opinion and Order on Reconsideration of the Seventh Report and Order and Eighth Report and Order (“Appendix B”). The purpose of requesting these proposed reduced facilities is to meet the provisions of Paragraph 140 of the Third Periodic Review Report and Order.<sup>3</sup> The proposed operation does not extend beyond the WMYT-DT facility in Appendix B (see Exhibit E-1) and the proposed operation is predicted to serve 2,762,067 persons in an area of 29,431 square kilometers, which is 98.9% of the population served by the WMYT-DT facility in the Appendix B.

Antenna Site

There is no change in the proposed antenna site. The antenna will be side-mounted on the existing tower at 560.6 meters above ground level.

The WMYT-DT antenna site is located at 945 Old Willis School Road, Dallas, North Carolina. The antenna structure registration is 1006705. A vertical sketch of the existing antenna structure has been included as Exhibit E-2.

The geographic coordinates of the existing tower are as follows:

North Latitude: 35° 21' 44"

West Longitude: 81° 09' 19"

(NAD-27)

The following data shows the pertinent information concerning the proposed operation.

Antenna and Elevation Data

Antenna:	Andrew	Model No. ALP16M4-HSOC-39 See Exhibit E-3 for technical exhibits required by Section 73.625(c)
Beam Tilt	1° electrical	

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<sup>3</sup>Ibid.

Input Power to Antenna	12.05 kW	10.8 dBk
Non-Directional Max. Power Gain	16.59	12.20 dB
Effective Radiated Power	200 kW	23.01 dBk
Elevation of the site above mean sea level:		245.6 meters 805.8 feet
Elevation of the top of existing supporting structure above ground including side-mounted DTV antenna		592.4 meters 1943.6 feet
Elevation of the top of supporting structure above mean sea level including side-mounted DTV antenna		838 meters 2749.3 feet
Height of DTV antenna radiation center meters above ground		562.2 meters 1844.4 feet
Height of DTV antenna radiation center above mean sea level		807.8 meters 2650.2 feet
Height of DTV antenna radiation center above average terrain		571 meters 1873.4 feet

#### Authorized Effective Radiated Power

The maximum ERP authorized by the outstanding construction permit for the DTV operation is 200 kW at 595.3 meters HAAT. Station WMYT-DT is proposing to operate its DTV facility with a maximum ERP of 225 kW and 571 meters HAAT using a non-directional transmitting antenna. This power and height will ensure that it does not extend the predicted 41 dBu contour in any direction beyond that authorized by the construction permit.

The attached map (Exhibit E-1) shows the computed F(50,90) 41 dBu contour predicted according to Section 73.625(b) of the Commission's rules based on the DTV facilities authorized in the outstanding construction permit and the requested facilities of 225 kW and ERP and 571 meters HAAT.

Principal Community Coverage

In MM Docket No. 00-83, the Commission adopted rules to require DTV stations to place a stronger TV signal over the principal community.

The operation proposed by Station WMYT-DT places a predicted 48 dBu contour over the community of license as shown in Exhibit E-4.

Topographic Data

The average elevation data of the eight cardinal radials from 3.2 to 16.1 kilometers, is based on the NGDC 3-second computerized terrain database.

Contour Data

Utilizing the formula in Section 73.625(b)(2) for the effective heights shown on the attached tabulation, the depression angle  $A_h$ , for each azimuth has been calculated. The maximum radiation value has been used to calculate ERP where the vertical radiation pattern at these angles is greater than 90% of the maximum.

Table I provides the distances along the eight cardinal radials to the predicted F(50,90) 41 dBu contour, the average elevations, and the effective antenna heights.

The distances along each radial to the limits of F(50,90) 48 and 41 dBu contour were determined as specified in Section 73.625(b) by reference to the propagation data for Channels 14-69, as published by the Commission in Figures 10b and 10c, Section 73.699 of its Rules.

Other Stations

There are numerous FM and TV broadcast stations located within 10 km of the proposed site. No objectionable interference problems are anticipated, however, if any problems occur, the applicant will take the necessary steps to resolve them. There are no AM stations within 3.22 km of the proposed site.

Environmental Statement

The WMYT-DT antenna will be side-mounted on the existing tower at 562.2 meters above ground. The other DTV antenna for WJZY-DT, Belmont, North Carolina, is located on the existing tower at 542.5 meters above ground.

There are numerous other transmitters operating from the tower. The following broadcast stations are operating from the tower:

WJZY-TV, Belmont, NC	Channel 46
WMYT-TV, Rock Hill, SC	Channel 55
WNKS(FM), Charlotte, NC	Channel 236C
WWMG(FM), Shelby, NC	Channel 241C
WPEG(FM), Concord, NC	Channel 250C

In addition, the following land mobile, cellular, paging and radiolocation stations are also operating from the tower:

WPEF547, Dallas, NC	WPHN945, Dallas, NC
WPES330, Dallas, NC	WPKE359, Dallas, NC
KPJ464, Dallas, NC	WNKE880, Dallas, NC
WNTG948, Charlotte, NC	WNNJ542, Dallas, NC
WMH496, Charlotte, NC	WNNF951, Dallas, NC
WPJM348, Dallas, NC	WPHS660, Dallas, NC
WNCV928, Dallas, NC	WNIE471, Dallas, NC
WNNF951, Dallas, NC	WPMU527, Dallas, NC
WPMV345, Dallas, NC	WPJN290, Dallas, NC
WPAR401, Dallas, NC	WPAR412, Dunn, NC

Because of the complexity of calculating the contribution of all these transmitters, RF measurements were taken at the site during October, 1998. Those measurements and analysis conducted by Doty-Moore are contained in a report entitled "WJZY Television Radio Frequency Radiation Hazard Survey." All of the transmitters listed above were active during the measurements.

The report indicates that a Narda 8718 meter using an 8742 probe was used to perform the measurements. RF measurements were performed on the ground as well as on the tower. According to the report the meter and probe were calibrated by Narda on November 12, 1998 after measurements were taken. The meter was checked prior to calibration and found to be within 10% of the calibrated data.

#### Radiofrequency Field Levels on the Ground

The Doty-Moore report further indicates that all measurements recorded on the ground were time averaged over 30 seconds. The percentages are based on the controlled exposure environment with 100% being the limit. The limit for an uncontrolled environment is 5 times less or 20%. No area on the ground exceeded the 20% limit therefore, no radiation hazard signs have been posted on the property.

Log number 32 was the highest measurement recorded on the ground. A level of 9.54% was measured between guys #8 and #9 at the outer B anchor. The RF contribution of the two DTV stations will be calculated and added to this value.

**Station WMYT-DT Request**

Channel 39 Freq: 620-626 MHz Range

$$S = \frac{33.4 (F^2) ERP}{R^2}$$

ERP	=	225,000 watts (Horizontal only)
R	=	560.2 meters (antenna height above ground - 2 meters)
F	=	0.1 (assumed)

$$S = <0.25 \text{ uW/cm}^2$$

Therefore WMYT-DT contributes less than 0.05 mW/cm<sup>2</sup> at 2 meters above the ground.

The limit for an uncontrolled environment (general population) is f/1500 for the 300-1500 MHz range.

$$(620 \text{ MHz})/1500 = 413 \text{ uW/cm}^2$$

**WMYT-DT contributes less than 0.07% RF for an uncontrolled environment (general population) two meters above the ground .**

**Station WJZY-DT** (Current Operation)

Channel 47 Freq: 668-674 MHz Range

$$S = \frac{33.4 (F^2) ERP}{R^2}$$

ERP	=	1,000,000 watts (Horizontal only)
R	=	540.2 meters (antenna height above ground - 2 meters)
F	=	0.05 (manufacturer data)

$$S = <0.29 \text{ uW/cm}^2$$

Therefore, WJZY-DT contributes less than 0.25 mW/cm<sup>2</sup> at 2 meters above the ground.

The limit for an uncontrolled environment is f/1500 for the 300-1500 MHz range.

$$(668 \text{ MHz})/1500 = 445 \text{ uW/cm}^2$$

Therefore under the STA scenario:

**WJZY-DT contributes less than 0.07% RF for an uncontrolled environment (general population) two meters above the ground.**

The estimated RF contributions of WWWB-DT and WJZY-DT will now be added to the worst case measurement recorded on the ground.

$$\text{RF measurements} + \text{WMYT-DT contribution} + \text{WJZY-DT contribution} = \text{Total RF}$$
$$9.54\% + <0.07\% + <0.07\% = <10\% \text{ (Total RF 2 meters above ground)}$$

Therefore the total RF percentage two meters above the ground at the highest RF measurement point will still be only less than 10% of the limit, under the worst case scenario, when WMYT-DT and WJZY-DT are operational. This value will still be less than the 20% limit required for an uncontrolled environment. Based on this analysis, no radiation hazard signs will be necessary.

The licensee indicates that all authorized personnel climbing the tower will be alerted to the potential zones of high field level on the tower. Authorized personnel required to work on the tower at a level higher than the limit switch at the 1352.5 foot level will be issued a separate key. The authorized tower climbers will have two way communication with a coordinator on the ground. The coordinator will monitor the power level of all stations and reduce power or shut off power to stations as necessary. The coordinator will be required to “lock out, tag out” transmitters so that all control is performed at the site. When tower personnel are back below the 1352.5 foot level the coordinator will remove the “lock out, tag out” and control will be returned to the station’s personnel.

#### Summary of Environmental Assessment

An environmental assessment (“EA”) is categorically excluded under Section 1.1306 of the FCC Rules and Regulations as the tower was constructed prior to the requirements specified in WT Docket No. 03-128 and the licensee indicates:

- (a)(1) The proposed facilities are not located in an officially designated wilderness area.

- (a)(2) The proposed facilities are not located in an officially designated wildlife preserve.
- (a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.
- (a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.
- (a)(4) The proposed facilities located on a tower which was built prior to the adoption of WT Docket No. 03-128 and is grandfathered and has not affected any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.
- (a)(5) The proposed facilities are not located near any known Indian religious sites.
- (a)(6) The proposed facilities are not located in a flood plain.
- (a)(7) The installation of the DTV facilities on an existing tower at an existing site will not involve a significant change in surface features of the ground in the vicinity of the tower.
- (a)(8) The existing tower lighting will remain unchanged.
- (b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin 65 (Edition 97-01) and Supplement A. Authorized personnel will be alerted to areas of the antennas where potential radiation levels are in excess of the FCC guidelines. A security fence with a locked gate precludes access to the tower site.

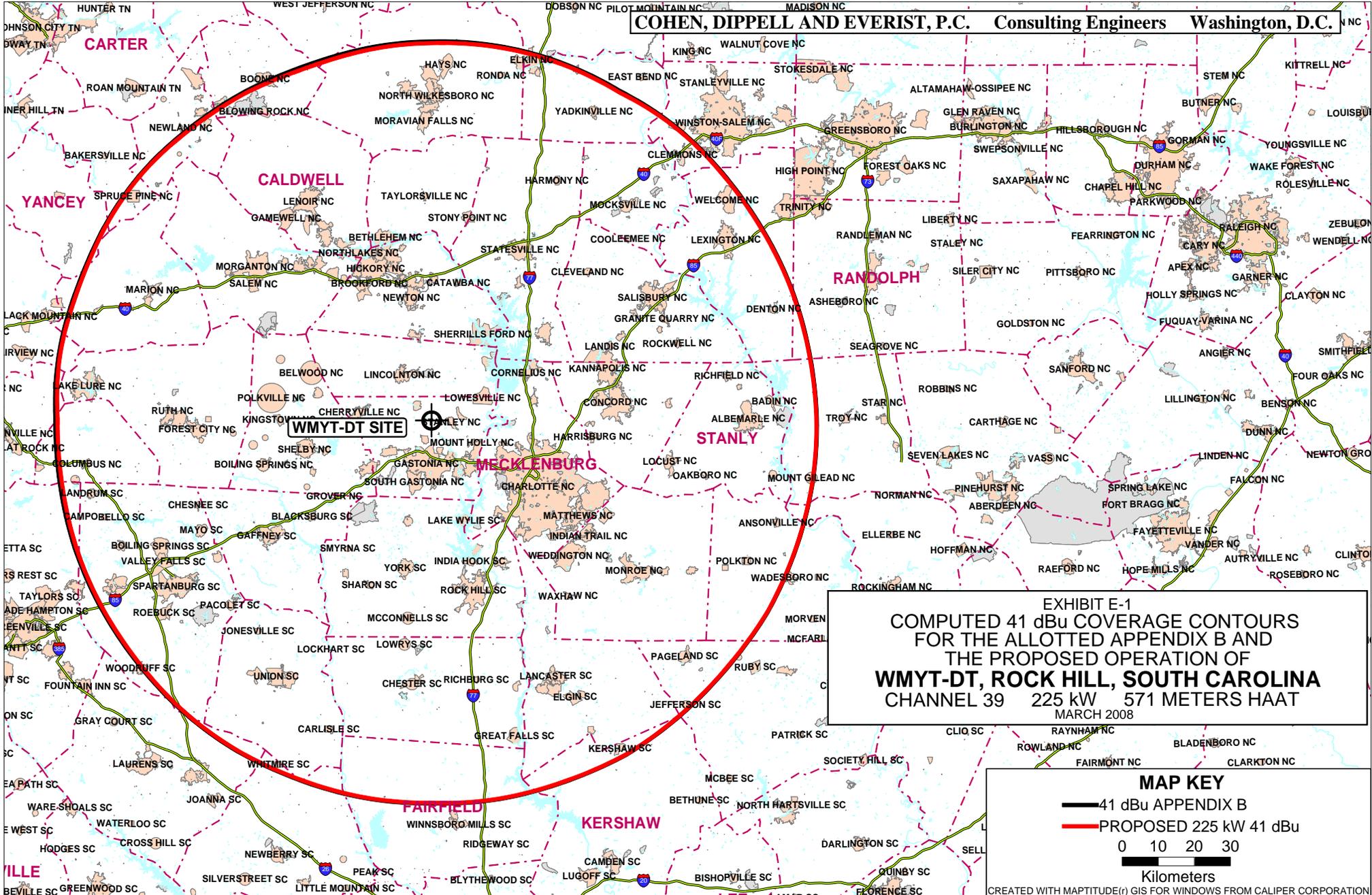


EXHIBIT E-1  
COMPUTED 41 dBu COVERAGE CONTOURS  
FOR THE ALLOTTED APPENDIX B AND  
THE PROPOSED OPERATION OF  
**WMYT-DT, ROCK HILL, SOUTH CAROLINA**  
CHANNEL 39 225 kW 571 METERS HAAT  
MARCH 2008

**MAP KEY**

- 41 dBu APPENDIX B
- PROPOSED 225 kW 41 dBu

0 10 20 30  
Kilometers

CREATED WITH MAPITITUDE(r) GIS FOR WINDOWS FROM CALIPER CORPORATION

**ABOVE GROUND**

**ABOVE MEAN SEA LEVEL**

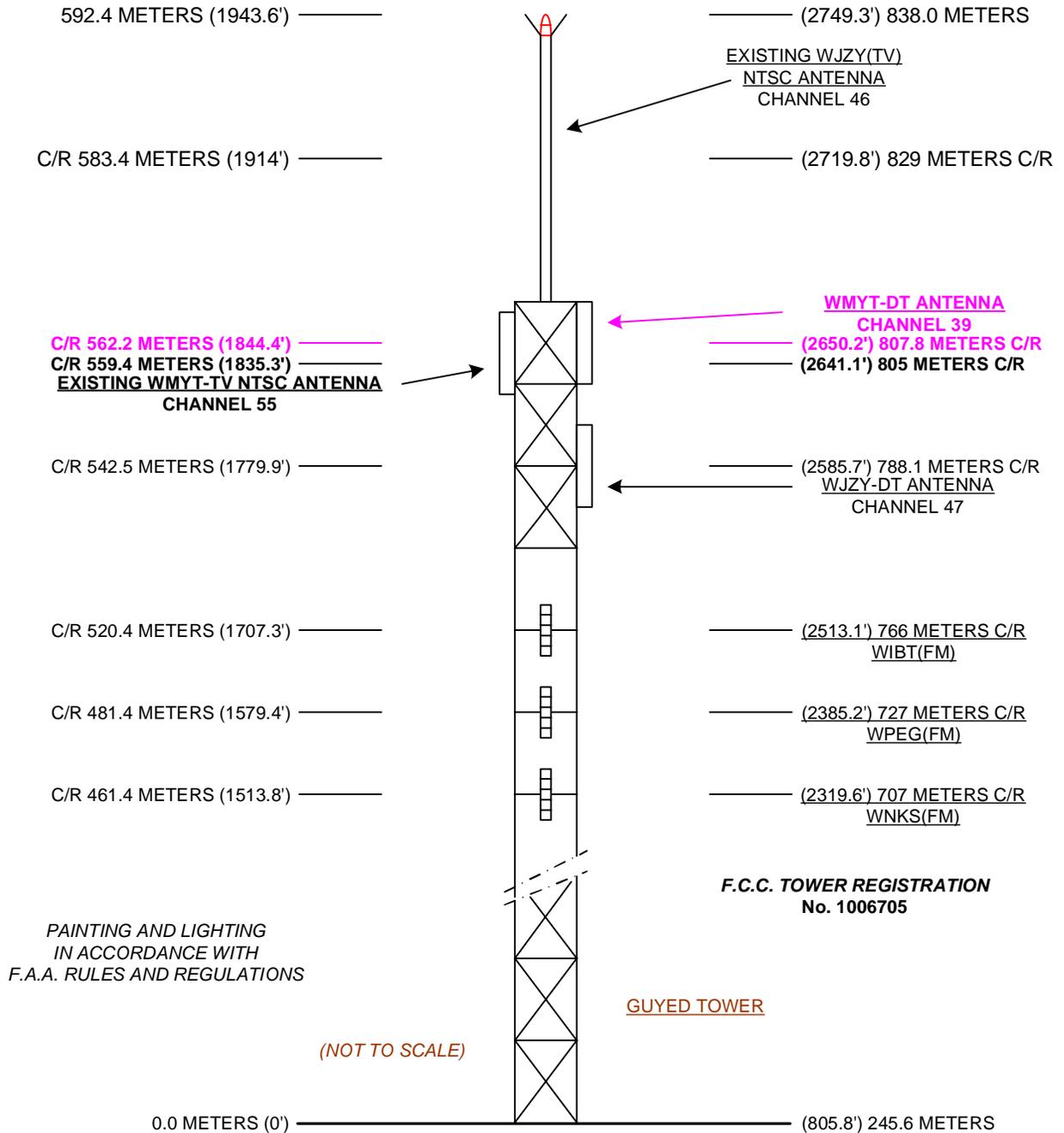


EXHIBIT E - 1  
 VERTICAL SKETCH  
 FOR THE MULTIPLE USE TOWER  
**WJZY(TV), BELMONT, NORTH CAROLINA**  
**WMYT-TV, ROCK HILL, SOUTH CAROLINA**

FEBRUARY 2008

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EXHIBIT E-3

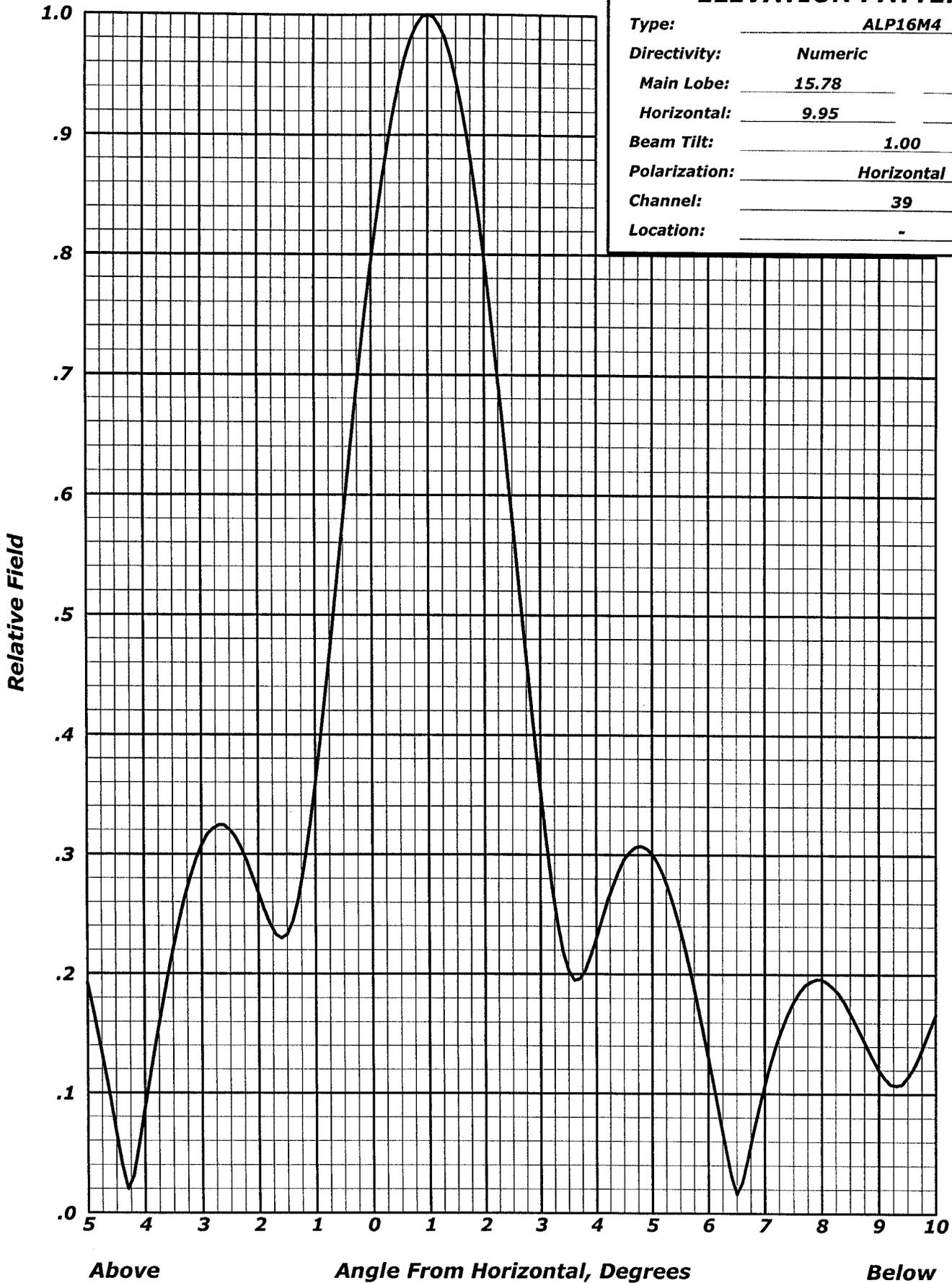
ANTENNA MANUFACTURER DATA

WMYT-DT, ROCK HILL, SOUTH CAROLINA



# ANDREW ELEVATION PATTERN

Type:	ALP16M4	
Directivity:	Numeric	dBd
Main Lobe:	15.78	(11.98)
Horizontal:	9.95	( 9.98)
Beam Tilt:	1.00	
Polarization:	Horizontal	
Channel:	39	
Location:	-	





**TABULATED DATA FOR ELEVATION PATTERN**  
**TYPE : ALP16M4**

Angle Field dB -5 To 10 In 0.25 Increments			Angle Field dB 10 To 90 In 0.5 Increments			Angle Field dB			Angle Field dB		
-5.00	0.192	-14.33	8.75	0.144	-16.83	35.00	0.148	-16.59	62.50	0.087	-21.21
-4.75	0.133	-17.49	9.00	0.120	-18.42	35.50	0.166	-15.60	63.00	0.093	-20.63
-4.50	0.067	-23.48	9.25	0.107	-19.37	36.00	0.171	-15.34	63.50	0.094	-20.54
-4.25	0.025	-31.87	9.50	0.114	-18.86	36.50	0.162	-15.81	64.00	0.091	-20.82
-4.00	0.087	-21.21	9.75	0.137	-17.27	37.00	0.141	-17.02	64.50	0.083	-21.62
-3.75	0.157	-16.05	10.00	0.167	-15.55	37.50	0.111	-19.09	65.00	0.075	-22.50
-3.50	0.221	-13.11	10.50	0.222	-13.07	38.00	0.077	-22.27	65.50	0.067	-23.48
-3.25	0.271	-11.32	11.00	0.248	-12.11	38.50	0.049	-26.20	66.00	0.064	-23.88
-3.00	0.307	-10.26	11.50	0.240	-12.40	39.00	0.042	-27.54	66.50	0.070	-23.10
-2.75	0.323	-9.83	12.00	0.202	-13.89	39.50	0.054	-25.35	67.00	0.084	-21.51
-2.50	0.320	-9.90	12.50	0.147	-16.65	40.00	0.065	-23.74	67.50	0.102	-19.83
-2.25	0.300	-10.47	13.00	0.089	-21.01	40.50	0.068	-23.35	68.00	0.123	-18.20
-2.00	0.268	-11.44	13.50	0.042	-27.54	41.00	0.062	-24.15	68.50	0.143	-16.89
-1.75	0.238	-12.49	14.00	0.012	-38.42	41.50	0.047	-26.56	69.00	0.163	-15.76
-1.50	0.233	-12.65	14.50	0.001	-60.00	42.00	0.028	-31.06	69.50	0.180	-14.89
-1.25	0.276	-11.17	15.00	0.010	-40.00	42.50	0.008	-41.94	70.00	0.196	-14.15
-1.00	0.359	-8.90	15.50	0.024	-32.40	43.00	0.013	-37.72	70.50	0.208	-13.64
-0.75	0.466	-6.64	16.00	0.036	-28.87	43.50	0.027	-31.37	71.00	0.217	-13.27
-0.50	0.580	-4.73	16.50	0.038	-28.40	44.00	0.036	-28.87	71.50	0.223	-13.03
-0.25	0.691	-3.20	17.00	0.027	-31.37	44.50	0.038	-28.40	72.00	0.227	-12.88
0.00	0.794	-2.00	17.50	0.005	-46.02	45.00	0.035	-29.12	72.50	0.227	-12.88
0.25	0.880	-1.11	18.00	0.028	-31.06	45.50	0.027	-31.37	73.00	0.225	-12.96
0.50	0.945	-0.49	18.50	0.056	-25.04	46.00	0.020	-33.98	73.50	0.220	-13.15
0.75	0.985	-0.13	19.00	0.074	-22.62	46.50	0.014	-37.08	74.00	0.213	-13.43
1.00	1.000	0.00	19.50	0.076	-22.38	47.00	0.014	-37.08	74.50	0.205	-13.76
1.25	0.986	-0.12	20.00	0.064	-23.88	47.50	0.013	-37.72	75.00	0.195	-14.20
1.50	0.946	-0.48	20.50	0.058	-24.73	48.00	0.010	-40.00	75.50	0.184	-14.70
1.75	0.881	-1.10	21.00	0.087	-21.21	48.50	0.002	-53.98	76.00	0.173	-15.24
2.00	0.796	-1.98	21.50	0.136	-17.33	49.00	0.010	-40.00	76.50	0.161	-15.86
2.25	0.694	-3.18	22.00	0.184	-14.70	49.50	0.025	-32.04	77.00	0.148	-16.59
2.50	0.581	-4.72	22.50	0.218	-13.23	50.00	0.041	-27.74	77.50	0.136	-17.33
2.75	0.464	-6.67	23.00	0.231	-12.73	50.50	0.057	-24.88	78.00	0.124	-18.13
3.00	0.353	-9.04	23.50	0.221	-13.11	51.00	0.069	-23.22	78.50	0.113	-18.94
3.25	0.259	-11.72	24.00	0.191	-14.38	51.50	0.077	-22.27	79.00	0.101	-19.91
3.50	0.203	-13.85	24.50	0.147	-16.65	52.00	0.080	-21.94	79.50	0.091	-20.82
3.75	0.199	-14.00	25.00	0.099	-20.09	52.50	0.076	-22.38	80.00	0.081	-21.83
4.00	0.230	-12.77	25.50	0.056	-25.04	53.00	0.068	-23.35	80.50	0.072	-22.85
4.25	0.268	-11.45	26.00	0.033	-29.63	53.50	0.055	-25.19	81.00	0.063	-24.01
4.50	0.296	-10.57	26.50	0.036	-28.87	54.00	0.043	-27.33	81.50	0.056	-25.04
4.75	0.306	-10.27	27.00	0.040	-27.96	54.50	0.036	-28.87	82.00	0.049	-26.20
5.00	0.301	-10.43	27.50	0.036	-28.87	55.00	0.040	-27.96	82.50	0.043	-27.33
5.25	0.276	-11.17	28.00	0.026	-31.70	55.50	0.052	-25.68	83.00	0.037	-28.64
5.50	0.238	-12.47	28.50	0.014	-37.08	56.00	0.065	-23.74	83.50	0.032	-29.90
5.75	0.188	-14.52	29.00	0.004	-47.96	56.50	0.074	-22.62	84.00	0.028	-31.06
6.00	0.130	-17.72	29.50	0.001	-60.00	57.00	0.079	-22.05	84.50	0.024	-32.40
6.25	0.068	-23.35	30.00	0.001	-60.00	57.50	0.077	-22.27	85.00	0.021	-33.56
6.50	0.016	-35.92	30.50	0.006	-44.44	58.00	0.070	-23.10	85.50	0.018	-34.89
6.75	0.057	-24.88	31.00	0.013	-37.72	58.50	0.058	-24.73	86.00	0.015	-36.48
7.00	0.107	-19.41	31.50	0.018	-34.89	59.00	0.041	-27.74	86.50	0.013	-37.72
7.25	0.148	-16.59	32.00	0.020	-33.98	59.50	0.022	-33.15	87.00	0.011	-39.17
7.50	0.177	-15.04	32.50	0.021	-33.56	60.00	0.006	-44.44	87.50	0.009	-40.92
7.75	0.193	-14.31	33.00	0.033	-29.63	60.50	0.023	-32.77	88.00	0.007	-43.10
8.00	0.196	-14.15	33.50	0.058	-24.73	61.00	0.044	-27.13	88.50	0.005	-46.02
8.25	0.186	-14.59	34.00	0.089	-21.01	61.50	0.062	-24.15	89.00	0.003	-50.46
8.50	0.168	-15.49	34.50	0.121	-18.34	62.00	0.077	-22.27	89.50	0.002	-53.98

COHEN, DIPPELL AND EVERIST, P.C.

TABLE I  
COMPUTED COVERAGE DATA  
FOR THE PROPOSED DTV OPERATION OF  
WMYT-TV, ROCK HILL, SOUTH CAROLINA  
CHANNEL 39 200 KW ERP 571 METERS HAAT  
MARCH 2008

Radial Bearing N ° E, T	Average*	Effective Height meters	Depression Angle	ERP At Radio Horizon kW	Distance to Contour F(50,90)	
	Elevation 3.2 to 16.1 km meters				48 dBu City Grade km	41 dBu Noise-Limited km
0	256.6	551.2	0.650	225.000	90.6	104.3
45	233.0	574.8	0.664	225.000	92.1	105.7
90	217.4	590.4	0.673	225.000	92.9	106.4
135	222.6	585.2	0.670	225.000	92.6	106.2
180	229.7	578.1	0.666	225.000	92.3	105.9
225	239.5	568.3	0.660	225.000	91.7	105.3
270	265.7	542.1	0.645	225.000	90.0	103.7
315	240.0	567.8	0.660	225.000	91.7	105.3
Average	238.1	569.7				

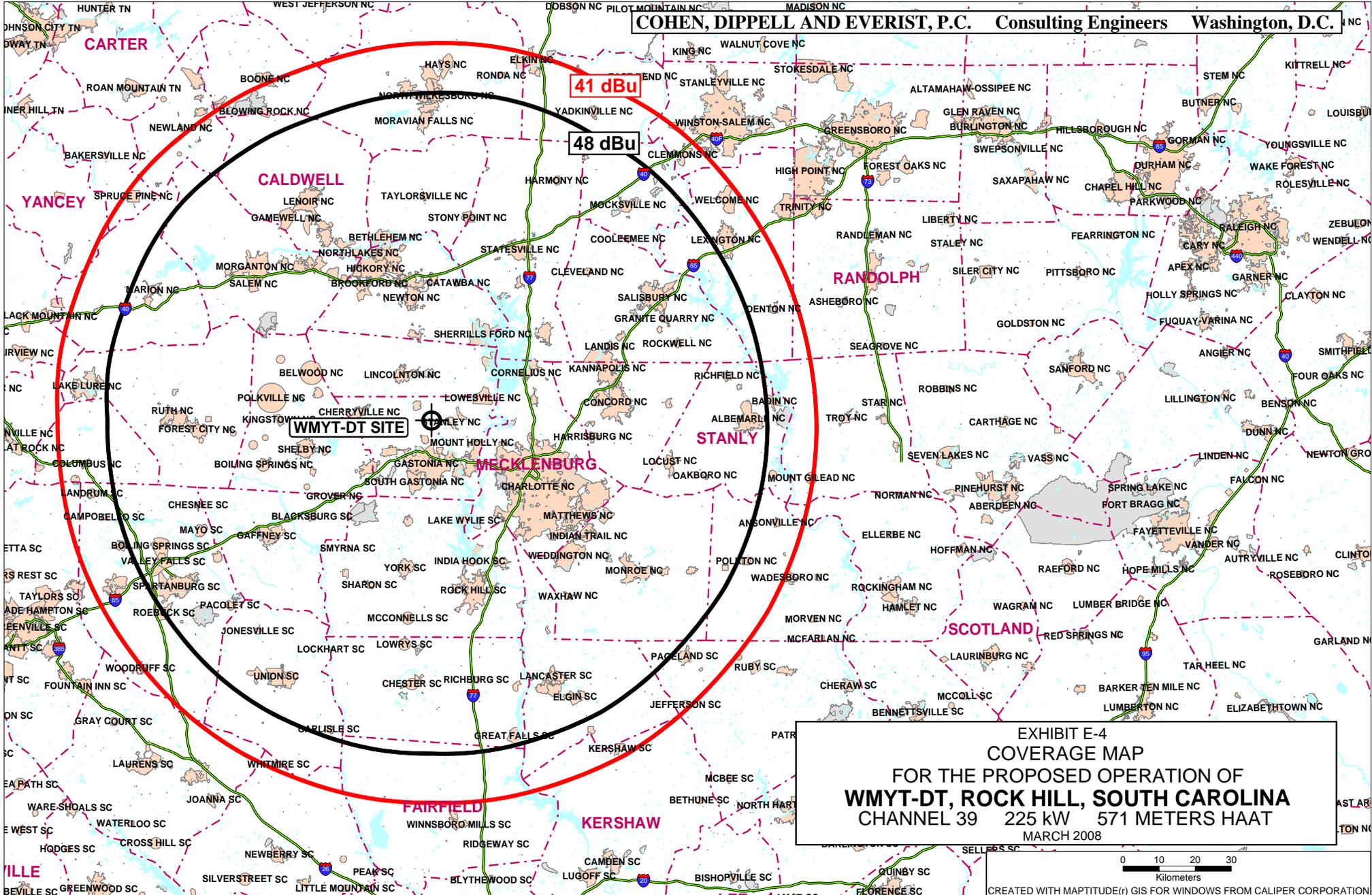
\*Based on data from FCC 3-second data base

Slight HAAT variations result from 3-second datum versus original site HAAT values based on 7.5 minute quadrangle map determination.

DTV Channel 39 (620-626 MHz)  
 Average Elevation 3.2 to 16.1 km 238.1 meters AMSL  
 Center of Radiation 807.8 meters AMSL  
 Antenna Height Above Average Terrain 571 meters  
 Effective Radiated Power 200 kW (23.01 dBk) Max.

North Latitude: 35° 21' 44"  
 West Longitude: 81° 09' 19"

(NAD-27)



CREATED WITH MAPITUDE(r) GIS FOR WINDOWS FROM CALIPER CORPORATION

**SECTION III - D - DTV Engineering**

**Complete Questions 1-5, and provide all data and information for the proposed facility, as requested in Technical Specifications, Items 1-13.**

**Pre-Transition Certification Checklist:** An application concerning a pre-transition channel must complete questions 1(a)-(c), and 2-5. A correct answer of "Yes" to all of the questions will ensure an expeditious grant of a construction permit application to modify pre-transition facilities. However, if the proposed facility is located within the Canadian or Mexican borders, coordination of the proposal under the appropriate treaties may be required prior to grant of the application. An answer of "No" will require additional evaluation of the applicable information in this form before a construction permit can be granted.

**Post-Transition Expedited Processing.** An application concerning a post-transition channel must complete questions 1(a), (d)-(e), and 2-5. A station applying for a construction permit to build its post-transition channel will receive expedited processing if its application (1) does not seek to expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B"); (2) specifies facilities that match or closely approximate those defined in the new DTV Table Appendix B facilities; and (3) is filed within 45 days of the effective date of Section 73.616 of the rules adopted in the Report and Order in the Third DTV Periodic Review proceeding, MB Docket No. 07-91.

- 1. The proposed DTV facility complies with 47 C.F.R. Section 73.622 in the following respects:
  - (a) It will operate on the DTV channel for this station as established in 47 C.F.R. Section 73.622.  Yes  No
  - (b) It will operate a pre-transition facility from a transmitting antenna located within 5.0 km (3.1 miles) of the DTV reference site for this station as established in 47 C.F.R. Section 73.622.  Yes  No
  - (c) It will operate a pre-transition facility with an effective radiated power (ERP) and antenna height above average terrain (HAAT) that do not exceed the DTV reference ERP and HAAT for this station as established in 47 C.F.R. Section 73.622.  Yes  No
  - (d) It will operate at post-transition facilities that do not expand the noise-limited service contour in any direction beyond that established by Appendix B of the Seventh Report and Order in MB Docket No. 87-268 establishing the new DTV Table of Allotments in 47 C.F.R. § 73.622(i) ("new DTV Table Appendix B").  Yes  No  
 N/A
  - (e) It will operate at post-transition facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the new DTV Table Appendix B.  Yes  No  
 N/A
- 2. The proposed facility will not have a significant environmental impact, including exposure of workers or the general public to levels of RIF radiation exceeding the applicable health and safety guidelines, and therefore will not come within 47 C.F.R. Section 1.1307.  Yes  No

Applicant must **submit the Exhibit** called for in Item 13.

- 3. Pursuant to 47 C.F.R. Section 73.625, the DTV coverage contour of the proposed facility will encompass the allotted principal community.  Yes  No
- 4. The requirements of 47 C.F.R. Section 73.1030 regarding notification to radio astronomy installations, radio receiving installations and FCC monitoring stations have either been satisfied or are not applicable.  Yes  No
- 5. The antenna structure to be used by this facility has been registered by the Commission and will not require reregistration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely effect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7.  Yes  No

**SECTION III - D DTV Engineering**

**TECHNICAL SPECIFICATIONS** Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable.

**TECH BOX**

1. Channel Number: DTV \_\_\_\_\_ Analog TV, if any \_\_\_\_\_

2. Zone:  I  II  III

3. Antenna Location Coordinates: (NAD 27)

\_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "  N  S Latitude  
 \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "  E  W Longitude

4. Antenna Structure Registration Number: \_\_\_\_\_

Not applicable  FAA Notification Filed with FAA

5. Antenna Location Site Elevation Above Mean Sea Level: \_\_\_\_\_ meters

6. Overall Tower Height Above Ground Level: \_\_\_\_\_ meters

7. Height of Radiation Center Above Ground Level: \_\_\_\_\_ meters

8. Height of Radiation Center Above Average Terrain: \_\_\_\_\_ meters

9. Maximum Effective Radiated Power (average power): \_\_\_\_\_ kW

10. Antenna Specifications:

Manufacturer	Model
--------------	-------

a.  Not Applicable

b. Electrical Beam Tilt: \_\_\_\_\_ degrees  Not Applicable

c. Mechanical Beam Tilt: \_\_\_\_\_ degrees toward azimuth \_\_\_\_\_ degrees True  Not Applicable

Attach as an Exhibit all data specified in 47 C.F.R. Section 73.625(c). Exhibit No.

d. Polarization:  Horizontal  Circular  Elliptical

**TECH BOX**

e. Directional Antenna Relative Field Values:  Not applicable (Nondirectional)  
 Rotation: \_\_\_\_\_ °  No rotation

Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value	Degree	Value
0		60		120		180		240		300	
10		70		130		190		250		310	
20		80		140		200		260		320	
30		90		150		210		270		330	
40		100		160		220		280		340	
50		110		170		230		290		350	
Additional Azimuths											

If a directional antenna is proposed, the requirements of 47 C.F.R. Section 73.625(c) must be satisfied. **Exhibit required.**

Exhibit No.

11. Does the proposed facility satisfy the pre-transition interference protection provisions of 47 C.F.R. Section 73.623(a) (Applicable only if **Certification Checklist** Items 1(a), (b), or (c) are answered "No.") and/or the post-transition interference protection provisions of 47 C.F.R. Section 73.616?  Yes  No

If "No," attach as an Exhibit justification therefore, including a summary of any related previously granted waivers.

Exhibit No.

12. If the proposed facility will not satisfy the coverage requirement of 47 C.F.R. Section 73.625, attach as an Exhibit justification therefore. (Applicable only if **Certification Checklist** Item 3 is answered "No.")

Exhibit No.

13. **Environmental Protection Act. Submit in an Exhibit** the following:

Exhibit No.

a. If **Certification Checklist Item 2** is answered "Yes," a brief explanation of why an Environmental Assessment is not required. Also describe in the Exhibit the steps that will be taken to limit RF radiation exposure to the public and to persons authorized access to the tower site.

By checking "Yes" to **Certification Checklist** Item 2, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radio frequency electromagnetic exposure in excess of FCC guidelines.

If **Certification Checklist** Item 2 is answered "No," an Environmental Assessment as required by 47 C.F.R. Section 1.1311.

**PREPARER'S CERTIFICATION IN SECTION III MUST BE COMPLETED AND SIGNED.**

13. **Petition for Rulemaking/Counterproposal to Add New FM Channel to FM Table of Allotments.** If the application is being submitted concurrently with a Petition for Rulemaking or Counterproposal to Amend the FM Table of Allotments (47 C.F.R. Section 73.202) to add a new FM channel allotment, petitioner/counter-proponent certifies that, if the FM channel allotment requested is allotted, petitioner/counter-proponent will apply to participate in the auction of the channel allotment requested and specified in this application.  Yes  No  N/A

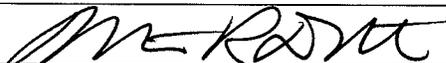
I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in 'good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

**SECTION III PREPARER'S CERTIFICATION**

I certify that I have prepared Section III (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

Name Martin R. Doczkat	Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 	Date March 14, 2008	
Mailing Address Cohen, Dippell and Everist, P.C, 1300 L Street, NW Suite 1100		
City Washington	State or Country (if foreign address) DC	ZIP Code 20005
Telephone Number (include area code) (202) 898-0111	E-Mail Address (if available) cde@attglobal.net	

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