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July 29, 1999

VIA FEDERAL EXPRESS

Ms. Magalie Roman Salas
Secretary
F.C.C.
The Portals
445 Twelfth Street, S.W.
Washington, D.C. 20554

RECEIVED
JUL 30 1999
FCC MAIL ROOM

Re: Goodlettsville, TN FM Proceeding; MM Docket No. 88-487

Dear Ms. Salas:

I represent William E. Bennis, III, one of the applicants in the above-referenced proceeding. All of the applicants have filed a Joint Request for Approval of Agreement, which contemplates a global settlement. Yesterday, pursuant to the terms of the settlement, I filed an amendment substituting Mid-TN Broadcasters, LLC, for Heidelberg-Stone Broadcasting Company as an applicant for the Goodlettsville, Tennessee, construction permit.

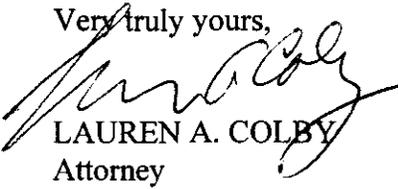
At this time, I am handing you for filing the original and two copies of an amendment to the application of Mid-TN Broadcasters, LLC. This amendment, which is also contemplated by the terms of the settlement, specifies a new transmitter site for the station and makes certain other changes in station facilities.

No. of Copies rec'd 042
List ABCDE

Ms. Salas
July 29, 1999
page 2

Should there be any questions concerning the enclosed, please communicate with the undersigned.

Very truly yours,



LAUREN A. COLBY
Attorney

LAC/tdm

Enclosure

cc: Mr. James Shook (Via Fax/Mail)
John Riffer, Esq. (Via Fax/Mail)
Timothy K. Brady, Esq.
C. Michael Norton, Esq.
Harry C. Martin, Esq.
Mr. William E. Bennis, III
Mr. James Crutchfield (Via Federal Express)

DOCKET FILE COPY ORIGINAL

File No. BPH-861217MA
MM Docket No. 88-487
Channel 246C2
Goodlettsville, Tennessee

RECEIVED
JUL 30 1999
FCC MAIL ROOM

AMENDMENT TO APPLICATION OF MID-TN BROADCASTERS, LLC

TO: The Federal Communications Commission

The above application is hereby amended by the submission of the attached engineering report, changing the transmitter site specified in the application and making other changes.

MID-TN BROADCASTERS, LLC

Dated: July 28, 1999

By: 
William E. Bennis, III
General Manager

ENGINEERING EXHIBIT E-1

AMENDMENT TO PENDING

APPLICATION - BPH-861217MA

CHANNEL 246C2 - GOODLETTSVILLE, TN

**Mid-TN Broadcasters, LLC
Goodlettsville, TN**

July 27, 1999

CARL E. SMITH CONSULTING ENGINEERS

CONTENTS

Title Page

Contents

FCC Form 301

Section III
Section III - B

Engineering Affidavits

Roy P. Stype, III

Elmer L. Steingass

Engineering Statement

1.0 General

Fig. 1.0 - Power Density Calculations

2.0 Allocation Considerations

Table 2.0 - FM Allocation Study - Channel 246C2
(97.1 MHz) - Goodlettsville, TN

Table 2.1 (a) - WXCM (App.)
60 dBu, 50% Contour

Table 2.1 (b) - WXCM (App.)
40 dbu, 10% Contour

Table 2.2 (a) - Proposed 60 dBu, 50% Contour

Table 2.2 (b) - Proposed 40 dBu, 10% Contour

Fig. 2.1 - FM Allocation Study Toward
WXCM (App.) - Whitesville, KY

3.0 Proposed Antenna System

Fig. 3.0 - Vertical Plan View

Table 3.1 - Vertical Radiation Pattern

Contents
(cont'd)

Fig. 3.1 - Vertical Radiation Pattern

4.0 Predicted Service Contours

Table 4.0 - Proposed 3.16 mV/m Contour

Table 4.1 - Proposed 1 mV/m Contour

Fig. 4.0 - Proposed Service Contours

5.0 Proposed Site

Fig. 5.0 - Topographic Map
Showing Proposed Site

Fig. 5.1 - Nearby Radio Facilities

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 Elmer L. Steingass		Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer	
Signature 		Date 7/27/99	
Mailing Address 2324 N. Cleveland-Massillon Road			
City Bath		State or Country (if foreign address) OH	ZIP Code 44210
Telephone Number (include area code) 330/659-4440		E-Mail Address (if available)	

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-B FM 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: 246
2. Class: A B1 B C3 C2 C1 C D
3. Antenna Location Coordinates: (NAD 27)

<u>36</u> °	<u>17</u> ' <u>50</u> "	<input checked="" type="checkbox"/> N	<input type="checkbox"/> S	Latitude
<u>86</u> °	<u>45</u> ' <u>11</u> "	<input type="checkbox"/> E	<input checked="" type="checkbox"/> W	Longitude
4. One-Step Proposal Allotment Coordinates: (NAD 27) Not applicable

_____ °	_____ ' _____ "	<input type="checkbox"/> N	<input type="checkbox"/> S	Latitude
_____ °	_____ ' _____ "	<input type="checkbox"/> E	<input type="checkbox"/> W	Longitude
5. Antenna Structure Registration Number: _____
 Not applicable FAA Notification Filed with FAA
6. Antenna Location Site Elevation Above Mean Sea Level: 268 meters
7. Overall Tower Height Above Ground Level: 82 meters
8. Height of Radiation Center Above Ground Level: 70 meters (H) 70 meters (V)
9. Height of Radiation Center Above Average Terrain: 158 meters (H) 158 meters (V)
10. Effective Radiated Power: 42.6 kW (H) 42.6 kW (V)
11. Maximum Effective Radiated Power: Not applicable 44.7 kW (H) 44.7 kW (V)
 (Beam-Tilt Antenna ONLY)
12. 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											

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

CERTIFICATION

AUXILIARY ANTENNA APPLICANTS ARE NOT REQUIRED TO RESPOND TO ITEMS 13-16.
PROCEED TO ITEM 17.

13. **Allotment.** The proposed facility complies with the allotment requirements of 47 C.F.R. Section 73.203. Yes No See Explanation in Exhibit No.

14. **Community Coverage.** The proposed facility complies with 47 C.F.R. Section 73.315. Yes No See Explanation in Exhibit No.

15. **Main Studio Location.** The proposed main studio location complies with 47 C.F.R. Section 73.1125. Yes No See Explanation in Exhibit No.

16. **Interference.** The proposed facility complies with all of the following applicable rule sections. Check all those that apply. Yes No See Explanation in Exhibit No.

Separation Requirements.

a. 47 C.F.R. Section 73.207.

Grandfathered Short-Spaced.

b. 47 C.F.R. Section 73.213(a) with respect to station(s): _____
Exhibit Required.

Exhibit No.

c. 47 C.F.R. Section 73.213(b) with respect to station(s): _____
Exhibit Required.

Exhibit No.

d. 47 C.F.R. Section 73.213(c) with respect to station(s): _____
Exhibit Required.

Exhibit No.

Contour Protection.

e. 47 C.F.R. Section 73.215 with respect to station(s): WXCM (App.)
Exhibit Required.

Exhibit No.
E-1

17. **Environmental Protection Act.** The proposed facility is excluded from environmental processing under 47 C.F.R. Section 1.1306 (i.e., the facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Appendix A, an Exhibit is required. Yes No See Explanation in Exhibit No.

By checking "Yes" above, 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 radiofrequency electromagnetic exposure in excess of FCC guidelines.

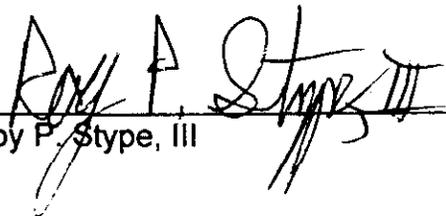
PREPARER'S CERTIFICATION ON PAGE 3 MUST BE COMPLETED AND SIGNED.

ENGINEERING AFFIDAVIT

State of Ohio)
) ss:
County of Summit)

Roy P. Stype, III, being duly sworn, deposes and states that he is a graduate Electrical Engineer, a qualified and experienced Communications Consulting Engineer whose works are a matter of record with the Federal Communications Commission and that he is a member of the Firm of "Carl E. Smith Consulting Engineers" located at 2324 North Cleveland-Massillon Road in the Township of Bath, County of Summit, State of Ohio, and that the Firm has been retained by Mid-TN Broadcasting, LLC to prepare the attached "Engineering Exhibit E-1."

The deponent states that the Exhibit was prepared by him or under his direction and is true of his own knowledge, except as to statements made on information and belief and as to such statements, he believes them to be true.



Roy P. Stype, III

Subscribed and sworn to before me on **July 27, 1999**.



Notary Public

/SEAL/

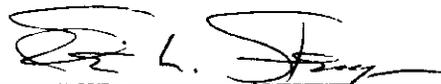
GAIL M. ELROD, Notary Public
Residence - Summit County
State Wide Jurisdiction, Ohio
My Commission Expires May 26, 2002

ENGINEERING AFFIDAVIT

State of Ohio)
) ss:
County of Summit)

Elmer L. Steingass, being duly sworn, deposes and states that he is a qualified and experienced Communications Consulting Engineer whose works are a matter of record with the Federal Communications Commission and that he is a member of the Firm of "Carl E. Smith Consulting Engineers" located at 2324 North Cleveland-Massillon Road in the Township of Bath, County of Summit, State of Ohio, and that the Firm has been retained by Mid-TN Broadcasting, LLC to prepare the attached "Engineering Exhibit E-1."

The deponent states that the Exhibit was prepared by him or under his direction and is true of his own knowledge, except as to statements made on information and belief and as to such statements, he believes them to be true.



Elmer L. Steingass

Subscribed and sworn to before me on July 27, 1999.



Notary Public

GAIL M. ELROD, Notary Public
Residence - Summit County
State Wide Jurisdiction, Ohio
My Commission Expires May 26, 2002

/SEAL/

ENGINEERING STATEMENT

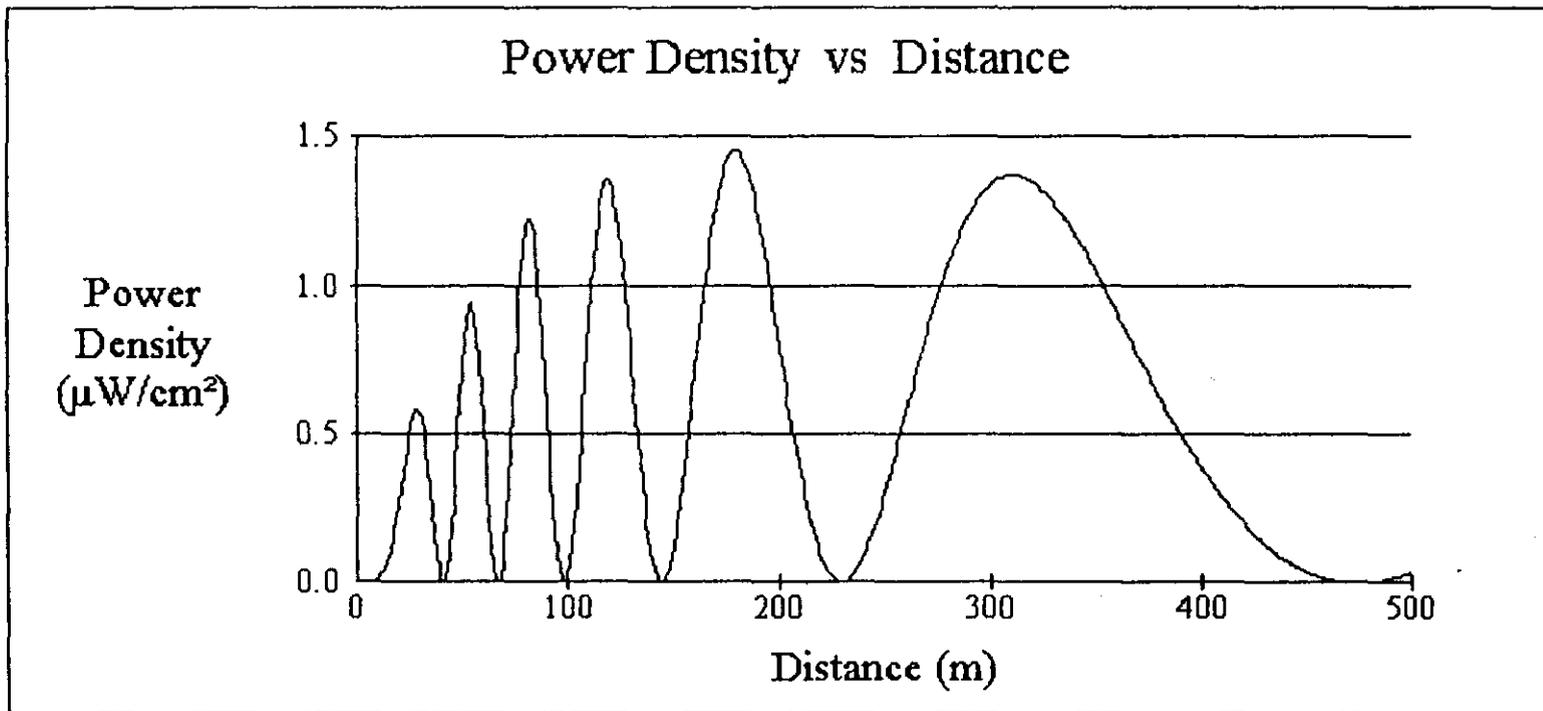
1.0 GENERAL

This engineering exhibit is prepared on behalf of Mid-TN Broadcasters, LLC, the proposed successor to the Heidelberg - Stone Broadcasting Company, as applicant (BPH-861217MA) for a construction permit for a new FM station on Channel 246C2 in Goodlettsville, Tennessee. It supports an amendment to the above referenced application to specify a different proposed transmitter site and modified proposed operating facilities.

The above referenced application proposes operation with a nondirectional effective radiated power of 24.5 kilowatts at 213 meters above average terrain, which is equivalent to the maximum permitted facilities for a Class C2 station. The attached amendment relocates the proposed transmitter site 1.8 kilometers east-southeast of the originally proposed site to the present transmitter site of WQQK(FM) - Hendersonville, Tennessee, increases the proposed effective radiated power to 44.7 kilowatts, and reduces the proposed antenna height to 158 meters above average terrain. The proposed facilities maintain equivalency to the maximum facilities permitted for a Class C2 station.

The antenna for the proposed facilities will employ a fourteen bay, half-wave spaced, circularly polarized antenna that will be mounted on a new tower which will replace the existing tower that presently supports the antenna for WQQK - Hendersonville, Tennessee. It should be noted that this new tower will be installed in the same location as the present WQQK tower but will be of greater height than the present tower in order to accommodate the installation of the new antenna proposed herein. The addition of the proposed facilities to this site will fully comply with the current FCC

levels at two meters above ground level for the proposed facilities were calculated using the FCC Office of Engineering and Technology's "FM Model" computer program. The results of these calculations are depicted in Figure 1.0. As can be seen from this figure, the maximum power density generated by the proposed facilities at two meters above ground level will be $1.45 \mu\text{W}/\text{cm}^2$, which will occur at a distance of 179 meters from the base of this tower. Since the permitted level for uncontrolled exposure in the FM band is $200 \mu\text{W}/\text{cm}^2$, this amounts to 0.73% of the permitted level. Since this value is less than 5% of the permitted level, the proposed facilities are excluded from environmental processing under this FCC Standard and need not be considered in conjunction with WQQK to establish compliance with this standard. The proposed facility, in conjunction with WQQK, will also take appropriate steps to insure that workers that must climb this tower will not be exposed to levels of nonionizing radiation that are in excess of the permitted level for controlled exposure. These steps will include the cessation of operation or a reduction in power by either or both of these stations, as appropriate, when work becomes necessary on this tower in any area where the total power density level will be in excess of the level permitted for controlled exposure.



Office of Engineering and Technology

Distance (m): Antenna Type:

Horizontal ERP (W): Number of Elements:

Vertical ERP (W): Element Spacing:

Antenna Height (m):

FIG. 1.0

POWER DENSITY CALCULATIONS

Mid-TN Broadcasting, LLC
 Goodlettsville, TN

2.0 ALLOCATION CONSIDERATIONS

Channel 246 is allotted to Goodlettsville, Tennessee, in Section 73.202(b) of the FCC Rules as a Class C2 facility. Table 2.0 is an FM allocation study showing the actual and required separations between the proposed facility and any applicable existing or proposed stations or allotments. As shown by this table, the proposed facility is short spaced to one station under the spacing requirements outlined in Section 73.207 of the FCC Rules:

WXCM(App.)	Whitesville, KY	Channel 246A
------------	-----------------	--------------

The short spacing to the pending application for WXCM is permitted under Section 73.215 of the FCC Rules so long as the appropriate contour protection is afforded to the WXCM application facilities. This short spacing also complies with the table in Section 73.215(e) of the FCC Rules which specifies the minimum separation at which contour protection may be employed. Since the pending WXCM application specifies operation on the same channel as the proposed facilities, Section 73.215 of the FCC Rules states that there can be no overlap between the 60 dBu, 50% contour for the proposed facilities and the 40 dBu, 10% contour of the facilities specified in the WXCM application. Furthermore, there can be no overlap between the proposed 60 dBu, 50% contour for WXCM and the 40 dBu, 10% contour for the facilities proposed herein. Since the WXCM application requests processing pursuant to Section 73.215 of the FCC Rules, the contours for the proposed WXCM facilities were projected using the station's actual proposed operating facilities, including the proposed directional pattern, as outlined in Paragraph (b)(2)(iii) of this rule section. Terrain data extracted from the NGDC 30 second terrain database was used in projecting the contours for the proposed WXCM facilities.

Tables 2.1(a) and 2.1(b) present the contour projections of the appropriate contours for the facilities proposed in the pending WXCM application. Tables 2.2(a) and 2.2(b) present the contour projections for the facilities proposed in the instant application. These contours are based upon the actual proposed operating facilities and terrain data extracted from the NGDC 30 second terrain database. Figure 2.1 presents all of these contours on an appropriate map base. As can be seen from this figure, the proposed facilities will provide the required protection to the facilities proposed in the WXCM application.

Finally, as shown in Table 2.0 the proposed facilities have adequate separation from all other facilities requiring consideration.

TABLE 2.0

FM ALLOCATION STUDY - CHANNEL 246C2 (97.1 MHz) - GOODLETTSVILLE, TN

MID-TN BROADCASTING, LLC
GOODLETTSVILLE, TN

STUDY COORDINATES: 36/17/50 86/45/11

STATION	LOCATION	CHANNEL	CLASS	SPACING (km)	REQUIRED SPACING*	NOTES
WDODFM	Chattanooga, TN	243	C	180.87	105.0	
WBVRFM	Bowling Green, KY	244	A	81.15	55.0	
WNKXFM	Centerville, TN	244	A	89.98	55.0	
ALLOTMENT	Byrdstown, TN	244	A	153.78	55.0	12
WDDJ	Paducah, KY	245	C1	186.13	158.0	
WRSA	Decatur, AL	245	C	200.86	188.0	
WXCM	Whitesville, KY	246	A	156.80	166.0	1, 5, 7, 11
WXCM	Hawesville, KY	246	A	166.50	166.0	1, 2, 4
WXCM	Whitesville, KY	246	A	168.41	166.0	5, 12
WXCM	Hawesville, KY	246	A	180.76	166.0	4
WSEK	Somerset, KY	246	C2	208.81	190.0	
WHRK	Memphis, TN	246	C1	320.48	224.0	
WKJQFM	Parsons, TN	247	A	141.92	106.0	1
WKXJ	South Pittsburg, TN	247	C2	178.60	130.0	
WRUL	Carmi, IL	247	B	236.11	169.0	
BPH961025MD	Hopkinsville, KY	248	A	78.95	55.0	7
BPH961025MC	Hopkinsville, KY	248	A	79.63	55.0	7
BPH961028MC	Hopkinsville, KY	248	A	80.35	55.0	7
ALLOTMENT	Hopkinsville, KY	248	A	83.34	55.0	12
BPH961028MD	Hopkinsville, KY	248	A	86.48	55.0	1, 7
WLLX	Lawrenceburg, TN	248	A	131.85	55.0	
WHRZ	Providence, KY	249	A	143.94	55.0	
WHHMFM	Henderson, TN	299	C3	193.21	17.0	
WCVQ	Fort Campbell, KY	300	C1	85.89	27.0	

* Required Spacing Per Section 73.207 of The FCC Rules

TABLE 2.0 (cont'd)

FM ALLOCATION STUDY - CHANNEL 246C2 (97.1 MHz) - GOODLETTSVILLE, TN

MID-TN BROADCASTING, LLC
GOODLETTSVILLE, TN

Notes:

- | | |
|--------------------------------------|----------------------------------|
| 1 - Applied For Under Section 73.215 | 7 - Pending Application |
| 2 - Construction Permit | 8 - Petition For Reconsideration |
| 3 - Channel Deletion Proposed | 9 - Proposed Rulemaking |
| 4 - Move From This Channel Ordered | 10 - Rulemaking Petition |
| 5 - Move to This Channel Ordered | 11 - Short-Spaced |
| 6 - One Step Reference Site | 12 - Vacant Allotment |

WXCM(APP) CH246A
60.0 dBu CONTOUR
(F(50,50) Curves Utilized)

BEARING (Degrees)	AVERAGE TERRAIN ELEVATION (meters)	ANTENNA HAAT (meters)	----- HORIZONTAL -----			DISTANCE TO CONTOUR (km)
			RELATIVE FIELD	(dBk)	ERP (kW)	
0.0 *	136.7	123.3	1.000	6.02	4.000	28.3
10.0 *	137.1	122.9	1.000	6.02	4.000	28.3
20.0 *	138.5	121.5	1.000	6.02	4.000	28.2
30.0 *	142.3	117.7	1.000	6.02	4.000	27.8
40.0 *	143.5	116.5	1.000	6.02	4.000	27.7
50.0 *	143.6	116.4	1.000	6.02	4.000	27.7
60.0 *	142.3	117.7	1.000	6.02	4.000	27.8
70.0 *	140.2	119.8	1.000	6.02	4.000	28.0
80.0 *	140.3	119.7	1.000	6.02	4.000	28.0
90.0 *	146.8	113.2	1.000	6.02	4.000	27.3
100.0 *	148.7	111.3	1.000	6.02	4.000	27.1
110.0 *	148.6	111.4	1.000	6.02	4.000	27.1
120.0 *	145.9	114.1	0.840	4.51	2.822	25.4
130.0 *	143.7	116.3	0.670	2.54	1.796	23.1
140.0 *	146.4	113.6	0.540	0.67	1.166	20.7
150.0 *	143.0	117.0	0.430	-1.31	0.740	18.7
160.0 *	142.9	117.1	0.430	-1.31	0.740	18.7
170.0 *	136.5	123.5	0.430	-1.31	0.740	19.2
180.0 *	134.3	125.7	0.430	-1.31	0.740	19.3
190.0 *	132.4	127.6	0.540	0.67	1.166	21.8
200.0 *	138.6	121.4	0.670	2.54	1.796	23.5
210.0 *	135.2	124.8	0.840	4.51	2.822	26.3
220.0 *	130.2	129.8	1.000	6.02	4.000	28.9
230.0 *	125.3	134.7	1.000	6.02	4.000	29.4
240.0 *	119.6	140.4	1.000	6.02	4.000	29.9
250.0 *	119.4	140.6	1.000	6.02	4.000	29.9
260.0 *	119.2	140.8	1.000	6.02	4.000	30.0
270.0 *	116.2	143.8	1.000	6.02	4.000	30.3
280.0 *	116.6	143.4	1.000	6.02	4.000	30.2
290.0 *	118.3	141.7	1.000	6.02	4.000	30.0
300.0 *	124.3	135.7	1.000	6.02	4.000	29.5
310.0 *	126.7	133.3	1.000	6.02	4.000	29.2
320.0 *	124.7	135.3	1.000	6.02	4.000	29.4
330.0 *	123.6	136.4	1.000	6.02	4.000	29.5
340.0 *	122.5	137.5	1.000	6.02	4.000	29.7
350.0 *	128.4	131.6	1.000	6.02	4.000	29.1

AVERAGE(*) = 134.0 meters

TABLE 2.1 (a)

WXCM (App.)
60 dBu, 50% CONTOUR

Mid-TN Broadcasting, LLC
Goodlettsville, TN

WXCM(APP) CH246A
 40.0 dBu CONTOUR
 (F(50,10) Curves Utilized)

BEARING (Degrees)	AVERAGE TERRAIN ELEVATION (meters)	ANTENNA HAAT (meters)	----- HORIZONTAL -----			DISTANCE TO CONTOUR (km)
			RELATIVE FIELD	(dBk)	ERP (kW)	
0.0 *	136.7	123.3	1.000	6.02	4.000	84.2
10.0 *	137.1	122.9	1.000	6.02	4.000	84.1
20.0 *	138.5	121.5	1.000	6.02	4.000	83.9
30.0 *	142.3	117.7	1.000	6.02	4.000	83.3
40.0 *	143.5	116.5	1.000	6.02	4.000	83.1
50.0 *	143.6	116.4	1.000	6.02	4.000	83.1
60.0 *	142.3	117.7	1.000	6.02	4.000	83.3
70.0 *	140.2	119.8	1.000	6.02	4.000	83.6
80.0 *	140.3	119.7	1.000	6.02	4.000	83.6
90.0 *	146.8	113.2	1.000	6.02	4.000	82.6
100.0 *	148.7	111.3	1.000	6.02	4.000	82.3
110.0 *	148.6	111.4	1.000	6.02	4.000	82.3
120.0 *	145.9	114.1	0.840	4.51	2.822	77.5
130.0 *	143.7	116.3	0.670	2.54	1.796	71.2
140.0 *	146.4	113.6	0.540	0.67	1.166	64.7
150.0 *	143.0	117.0	0.430	-1.31	0.740	59.5
160.0 *	142.9	117.1	0.430	-1.31	0.740	59.5
170.0 *	136.5	123.5	0.430	-1.31	0.740	60.5
180.0 *	134.3	125.7	0.430	-1.31	0.740	60.8
190.0 *	132.4	127.6	0.540	0.67	1.166	67.1
200.0 *	138.6	121.4	0.670	2.54	1.796	72.1
210.0 *	135.2	124.8	0.840	4.51	2.822	79.2
220.0 *	130.2	129.8	1.000	6.02	4.000	85.2
230.0 *	125.3	134.7	1.000	6.02	4.000	85.9
240.0 *	119.6	140.4	1.000	6.02	4.000	86.8
250.0 *	119.4	140.6	1.000	6.02	4.000	86.8
260.0 *	119.2	140.8	1.000	6.02	4.000	86.8
270.0 *	116.2	143.8	1.000	6.02	4.000	87.3
280.0 *	116.6	143.4	1.000	6.02	4.000	87.2
290.0 *	118.3	141.7	1.000	6.02	4.000	87.0
300.0 *	124.3	135.7	1.000	6.02	4.000	86.1
310.0 *	126.7	133.3	1.000	6.02	4.000	85.7
320.0 *	124.7	135.3	1.000	6.02	4.000	86.0
330.0 *	123.6	136.4	1.000	6.02	4.000	86.2
340.0 *	122.5	137.5	1.000	6.02	4.000	86.4
350.0 *	128.4	131.6	1.000	6.02	4.000	85.5

AVERAGE(*) = 134.0 meters

TABLE 2.1 (b)

WXCM (App.)
 40 dBu, 10% CONTOUR
 Mid-TN Broadcasting, LLC
 Goodlettsville, TN

GOODLETTSVILLE CH246C2
60.0 dBu CONTOUR
(F(50,50) Curves Utilized)

BEARING (Degrees)	AVERAGE TERRAIN ELEVATION (meters)	ANTENNA HAAT (meters)	HORIZONTAL ERP		DISTANCE TO CONTOUR (km)
			(dBk)	(kW)	
0.0 *	210.1	128.5	16.50	44.703	48.2
10.0	199.9	138.7	16.50	44.703	49.6
20.0	197.0	141.6	16.50	44.703	50.0
30.0	188.3	150.3	16.50	44.703	51.2
40.0	181.5	157.1	16.50	44.703	52.1
45.0 *	178.2	160.4	16.50	44.703	52.5
50.0	175.9	162.7	16.50	44.703	52.8
60.0	169.2	169.4	16.50	44.703	53.5
70.0	157.6	181.0	16.50	44.703	54.7
80.0	155.2	183.4	16.50	44.703	54.9
90.0 *	145.4	193.2	16.50	44.703	55.7
100.0	137.7	200.9	16.50	44.703	56.4
110.0	140.0	198.6	16.50	44.703	56.2
120.0	144.1	194.5	16.50	44.703	55.9
130.0	144.8	193.8	16.50	44.703	55.8
135.0 *	141.8	196.8	16.50	44.703	56.1
140.0	139.5	199.1	16.50	44.703	56.3
150.0	141.7	196.9	16.50	44.703	56.1
160.0	151.1	187.5	16.50	44.703	55.3
170.0	168.6	170.0	16.50	44.703	53.6
180.0 *	169.5	169.1	16.50	44.703	53.5
190.0	154.7	183.9	16.50	44.703	54.9
200.0	154.1	184.5	16.50	44.703	55.0
210.0	153.0	185.6	16.50	44.703	55.1
220.0	158.1	180.5	16.50	44.703	54.6
225.0 *	166.6	172.0	16.50	44.703	53.8
230.0	176.8	161.8	16.50	44.703	52.7
240.0	183.0	155.6	16.50	44.703	51.9
250.0	192.7	145.9	16.50	44.703	50.6
260.0	207.8	130.8	16.50	44.703	48.5
270.0 *	212.3	126.3	16.50	44.703	47.9
280.0	219.7	118.9	16.50	44.703	46.8
290.0	217.4	121.2	16.50	44.703	47.2
300.0	220.5	118.1	16.50	44.703	46.7
310.0	216.4	122.2	16.50	44.703	47.3
315.0 *	222.5	116.1	16.50	44.703	46.4
320.0	234.4	104.2	16.50	44.703	44.5
330.0	238.9	99.7	16.50	44.703	43.8
340.0	238.4	100.2	16.50	44.703	43.9
350.0	220.9	117.7	16.50	44.703	46.6

AVERAGE(*) = 180.8 meters

TABLE 2.2 (a)

PROPOSED 60 dBu, 50% CONTOUR

Mid-TN Broadcasting, LLC
Goodlettsville, TN

GOODLETTSVILLE CH246C2
40.0 dBu CONTOUR
(F(50,10) Curves Utilized)

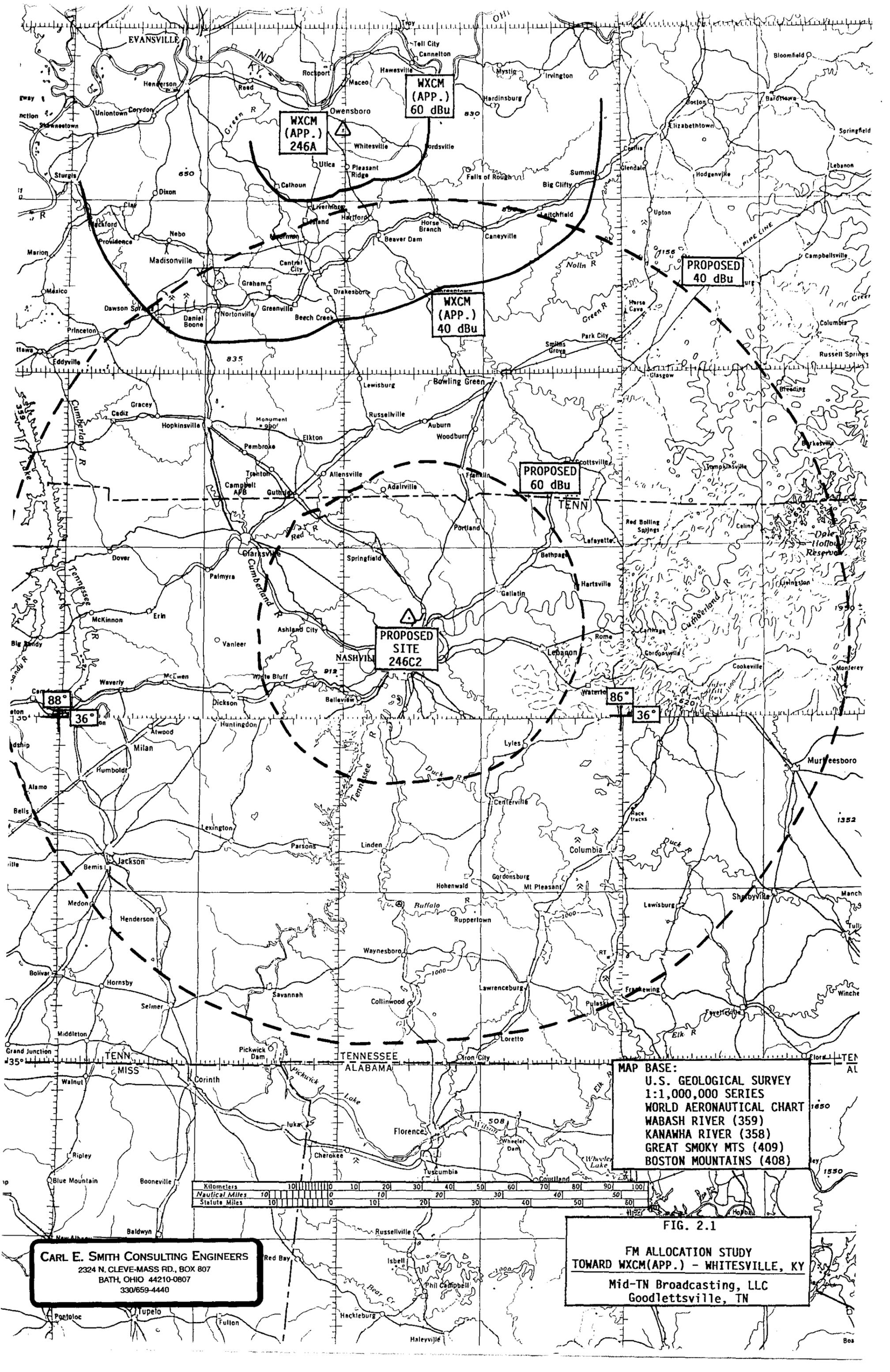
BEARING (Degrees)	AVERAGE TERRAIN ELEVATION (meters)	ANTENNA HAAT (meters)	HORIZONTAL ERP (dBk) (kW)		DISTANCE TO CONTOUR (km)
0.0 *	210.1	128.5	16.50	44.703	132.3
10.0	199.9	138.7	16.50	44.703	133.7
20.0	197.0	141.6	16.50	44.703	134.1
30.0	188.3	150.3	16.50	44.703	135.3
40.0	181.5	157.1	16.50	44.703	136.2
45.0 *	178.2	160.4	16.50	44.703	136.6
50.0	175.9	162.7	16.50	44.703	136.9
60.0	169.2	169.4	16.50	44.703	137.8
70.0	157.6	181.0	16.50	44.703	139.3
80.0	155.2	183.4	16.50	44.703	139.6
90.0 *	145.4	193.2	16.50	44.703	140.8
100.0	137.7	200.9	16.50	44.703	141.8
110.0	140.0	198.6	16.50	44.703	141.5
120.0	144.1	194.5	16.50	44.703	141.0
130.0	144.8	193.8	16.50	44.703	140.9
135.0 *	141.8	196.8	16.50	44.703	141.3
140.0	139.5	199.1	16.50	44.703	141.6
150.0	141.7	196.9	16.50	44.703	141.3
160.0	151.1	187.5	16.50	44.703	140.1
170.0	168.6	170.0	16.50	44.703	137.9
180.0 *	169.5	169.1	16.50	44.703	137.8
190.0	154.7	183.9	16.50	44.703	139.7
200.0	154.1	184.5	16.50	44.703	139.8
210.0	153.0	185.6	16.50	44.703	139.9
220.0	158.1	180.5	16.50	44.703	139.2
225.0 *	166.6	172.0	16.50	44.703	138.2
230.0	176.8	161.8	16.50	44.703	136.8
240.0	183.0	155.6	16.50	44.703	136.0
250.0	192.7	145.9	16.50	44.703	134.7
260.0	207.8	130.8	16.50	44.703	132.6
270.0 *	212.3	126.3	16.50	44.703	132.0
280.0	219.7	118.9	16.50	44.703	131.0
290.0	217.4	121.2	16.50	44.703	131.3
300.0	220.5	118.1	16.50	44.703	130.8
310.0	216.4	122.2	16.50	44.703	131.4
315.0 *	222.5	116.1	16.50	44.703	130.6
320.0	234.4	104.2	16.50	44.703	128.7
330.0	238.9	99.7	16.50	44.703	127.9
340.0	238.4	100.2	16.50	44.703	128.0
350.0	220.9	117.7	16.50	44.703	130.8

AVERAGE(*) = 180.8 meters

TABLE 2.2 (b)

PROPOSED 40 dBu, 10% CONTOUR

Mid-TN Broadcasting, LLC
Goodlettsville, TN



WXCM
(APP.)
246A

WXCM
(APP.)
60 dBu

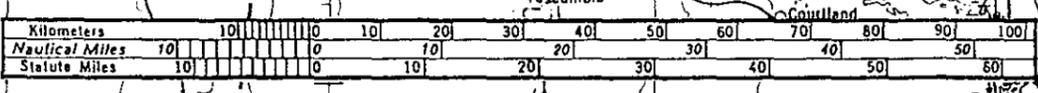
WXCM
(APP.)
40 dBu

PROPOSED
40 dBu

PROPOSED
60 dBu

PROPOSED SITE
246C2

MAP BASE:
U.S. GEOLOGICAL SURVEY
1:1,000,000 SERIES
WORLD AERONAUTICAL CHART
WABASH RIVER (359)
KANAWHA RIVER (358)
GREAT SMOKY MTS (409)
BOSTON MOUNTAINS (408)



CARL E. SMITH CONSULTING ENGINEERS
2324 N. CLEVE-MASS RD., BOX 807
BATH, OHIO 44210-0807
330/659-4440

FIG. 2.1
FM ALLOCATION STUDY
TOWARD WXCM(APP.) - WHITESVILLE, KY
Mid-TN Broadcasting, LLC
Goodlettsville, TN

3.0 PROPOSED ANTENNA SYSTEM

The proposed antenna will be a Jampro JSCP-14(RFR) fourteen bay, half-wave spaced, circularly polarized antenna which will be mounted on a new tower which will replace the existing tower that presently supports the antenna for WQQK - Hendersonville, Tennessee. It should be noted that this new tower will be installed in the same location as the present WQQK tower but will be of greater height than the present tower in order to accommodate the installation of the new antenna proposed herein. This tower will also continue to support the antenna for WQQK(FM). Figure 3.0 is a vertical plan view of the proposed installation. In order to satisfy FAA concerns regarding predicted electromagnetic interference to air navigation facilities, the applicant has agreed to utilize a fourteen bay half wave spaced antenna which will also include 1° of electrical beam tilt. Table 3.1 and Figure 3.1 present the vertical radiation pattern for this proposed antenna, including the proposed electrical beam tilt.

At its present height, the existing WQQK tower does not require registration under the FCC's Antenna Structure Registration program. Registration will be required, however, at the increased height proposed herein. Upon the receipt of FAA approval for this proposed increased height, this structure will be registered and the registration number will be supplied as a further amendment to this application.

MTB/LVP-1 7/23/09

REGISTRATION OF THIS
STRUCTURE WAS NOT
REQUIRED AT THE PRESENT
HEIGHT OF 60.4m AGL.
FAA APPROVAL FOR INCREASED
HEIGHT IS PENDING.
REGISTRATION PROCESS
WILL BE COMPLETED UPON
RECEIPT OF FAA APPROVAL.

PROPOSED
ANTENNA

EXISTING
WQQK
ANTENNA

880' (268.2m) MSL

1053' (320.9m) MSL

1111' (338.6m) MSL

1149' (350.2m) MSL

269'
(82.0m)

231'
(70.4m)

173'
(52.7m)

NOT TO SCALE

NL - 36° 17' 50"

WL - 86° 45' 11"

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BATH, OHIO 44210-0807
(330) 659-4440

FIG. 3.0

VERTICAL PLAN VIEW

MID-TN BROADCASTING, LLC
GOODLETTSVILLE, TN

TABLE OF FIELD STRENGTH FOR : JSCP14.ELV

INCREMENTAL DEGREES

	0	1	2	3	4	5	6	7	8	9
+	.976	.905	.794	.646	.487	.322	.165	.025	.086	.164
-	.976	1.000	.976	.896	.787	.647	.488	.321	.165	.028
D -10	.083	.160	.201	.212	.192	.150	.097	.037	.019	.067
E -20	.100	.118	.121	.108	.083	.052	.017	.017	.046	.068
G -30	.081	.084	.077	.064	.046	.024	.002	.019	.036	.049
R -40	.057	.059	.057	.049	.039	.027	.014	.000	.012	.023
E -50	.032	.037	.041	.042	.040	.037	.032	.026	.020	.013
E -60	.006	.000	.006	.011	.015	.018	.020	.022	.022	.023
S -70	.023	.022	.021	.019	.018	.016	.014	.013	.011	.010
-80	.008	.007	.006	.006	.005	.005	.004	.003	.003	.003
-90	.003									

TABLE 3.1

VERTICAL RADIATION PATTERN

Mid-TN Broadcasting, LLC
Goodlettsville, TN

Frequency: <MHz> 97.10

File Name: JSCP14.ELU

JAMPRO ANTENNAS INC.

Bays : 14

ELEVATION PATTERN

Spacing (Wavelength): .50

Model : SIDEMNT

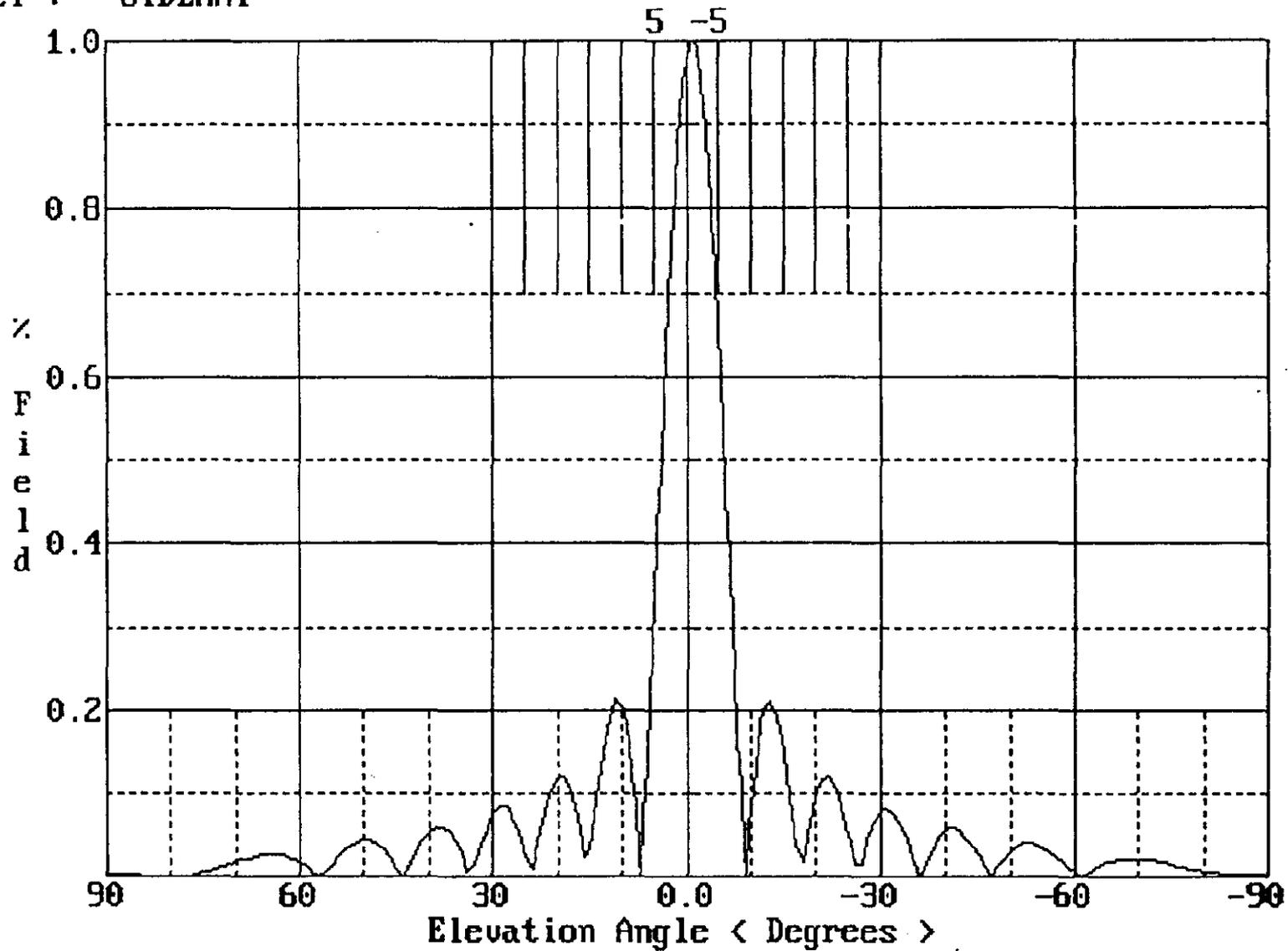


FIG. 3.1

VERTICAL RADIATION PATTERN

Mid-TN Broadcasting, LLC
Goodlettsville, TN

4.0 PREDICTED SERVICE CONTOURS

Table 4.0 presents a tabulation of the proposed 3.16 mV/m contour. Likewise, Table 4.1 lists the proposed 1 mV/m contour. To insure sufficient detail, these contours were projected at azimuth intervals of no more than ten degrees. Only the eight cardinal radials, however, were used in calculating the overall antenna height above average terrain. Using these average elevations, the contours were projected as specified by Section 73.313 of the FCC Rules. These contours are shown on an appropriate map base in relation to the Goodlettsville city limits in Figure 4.0. As can be seen from this figure, the proposed 3.16 mV/m contour will encompass all of Goodlettsville, as required by Section 73.315(a) of the FCC Rules.

GOODLETTSVILLE CH246C2
70.0 dBu CONTOUR
(F(50.50) Curves Utilized)

BEARING (Degrees)	AVERAGE TERRAIN ELEVATION (meters)	ANTENNA HAAT (meters)	HORIZONTAL ERP (dBk) (kW)		DISTANCE TO CONTOUR (km)
0.0 *	210.1	128.5	16.50	44.703	29.5
10.0	199.9	138.7	16.50	44.703	30.5
20.0	197.0	141.6	16.50	44.703	30.8
30.0	188.3	150.3	16.50	44.703	31.8
40.0	181.5	157.1	16.50	44.703	32.5
45.0 *	178.2	160.4	16.50	44.703	32.8
50.0	175.9	162.7	16.50	44.703	33.1
60.0	169.2	169.4	16.50	44.703	33.8
70.0	157.6	181.0	16.50	44.703	34.9
80.0	155.2	183.4	16.50	44.703	35.1
90.0 *	145.4	193.2	16.50	44.703	35.9
100.0	137.7	200.9	16.50	44.703	36.5
110.0	140.0	198.6	16.50	44.703	36.3
120.0	144.1	194.5	16.50	44.703	36.0
130.0	144.8	193.8	16.50	44.703	35.9
135.0 *	141.8	196.8	16.50	44.703	36.2
140.0	139.5	199.1	16.50	44.703	36.4
150.0	141.7	196.9	16.50	44.703	36.2
160.0	151.1	187.5	16.50	44.703	35.4
170.0	168.6	170.0	16.50	44.703	33.8
180.0 *	169.5	169.1	16.50	44.703	33.7
190.0	154.7	183.9	16.50	44.703	35.1
200.0	154.1	184.5	16.50	44.703	35.2
210.0	153.0	185.6	16.50	44.703	35.3
220.0	158.1	180.5	16.50	44.703	34.8
225.0 *	166.6	172.0	16.50	44.703	34.0
230.0	176.8	161.8	16.50	44.703	33.0
240.0	183.0	155.6	16.50	44.703	32.3
250.0	192.7	145.9	16.50	44.703	31.3
260.0	207.8	130.8	16.50	44.703	29.8
270.0 *	212.3	126.3	16.50	44.703	29.3
280.0	219.7	118.9	16.50	44.703	28.6
290.0	217.4	121.2	16.50	44.703	28.8
300.0	220.5	118.1	16.50	44.703	28.5
310.0	216.4	122.2	16.50	44.703	28.9
315.0 *	222.5	116.1	16.50	44.703	28.3
320.0	234.4	104.2	16.50	44.703	27.0
330.0	238.9	99.7	16.50	44.703	26.5
340.0	238.4	100.2	16.50	44.703	26.5
350.0	220.9	117.7	16.50	44.703	28.5

AVERAGE(*) = 180.8 meters

TABLE 4.0

PROPOSED 3.16 mV/m CONTOUR
Mid-TN Broadcasting, LLC
Goodlettsville, TN

GOODLETTSVILLE CH246C2
60.0 dBu CONTOUR
(F(50,50) Curves Utilized)

BEARING (Degrees)	AVERAGE	ANTENNA	HORIZONTAL		DISTANCE
	TERRAIN ELEVATION (meters)	HAAT (meters)	ERP (dBk)	(kW)	TO CONTOUR (km)
0.0 *	210.1	128.5	16.50	44.703	48.2
10.0	199.9	138.7	16.50	44.703	49.6
20.0	197.0	141.6	16.50	44.703	50.0
30.0	188.3	150.3	16.50	44.703	51.2
40.0	181.5	157.1	16.50	44.703	52.1
45.0 *	178.2	160.4	16.50	44.703	52.5
50.0	175.9	162.7	16.50	44.703	52.8
60.0	169.2	169.4	16.50	44.703	53.5
70.0	157.6	181.0	16.50	44.703	54.7
80.0	155.2	183.4	16.50	44.703	54.9
90.0 *	145.4	193.2	16.50	44.703	55.7
100.0	137.7	200.9	16.50	44.703	56.4
110.0	140.0	198.6	16.50	44.703	56.2
120.0	144.1	194.5	16.50	44.703	55.9
130.0	144.8	193.8	16.50	44.703	55.8
135.0 *	141.8	196.8	16.50	44.703	56.1
140.0	139.5	199.1	16.50	44.703	56.3
150.0	141.7	196.9	16.50	44.703	56.1
160.0	151.1	187.5	16.50	44.703	55.3
170.0	168.6	170.0	16.50	44.703	53.6
180.0 *	169.5	169.1	16.50	44.703	53.5
190.0	154.7	183.9	16.50	44.703	54.9
200.0	154.1	184.5	16.50	44.703	55.0
210.0	153.0	185.6	16.50	44.703	55.1
220.0	158.1	180.5	16.50	44.703	54.6
225.0 *	166.6	172.0	16.50	44.703	53.8
230.0	176.8	161.8	16.50	44.703	52.7
240.0	183.0	155.6	16.50	44.703	51.9
250.0	192.7	145.9	16.50	44.703	50.6
260.0	207.8	130.8	16.50	44.703	48.5
270.0 *	212.3	126.3	16.50	44.703	47.9
280.0	219.7	118.9	16.50	44.703	46.8
290.0	217.4	121.2	16.50	44.703	47.2
300.0	220.5	118.1	16.50	44.703	46.7
310.0	216.4	122.2	16.50	44.703	47.3
315.0 *	222.5	116.1	16.50	44.703	46.4
320.0	234.4	104.2	16.50	44.703	44.5
330.0	238.9	99.7	16.50	44.703	43.8
340.0	238.4	100.2	16.50	44.703	43.9
350.0	220.9	117.7	16.50	44.703	46.6

AVERAGE(*) = 180.8 meters

TABLE 4.1

PROPOSED 1 mV/m CONTOUR

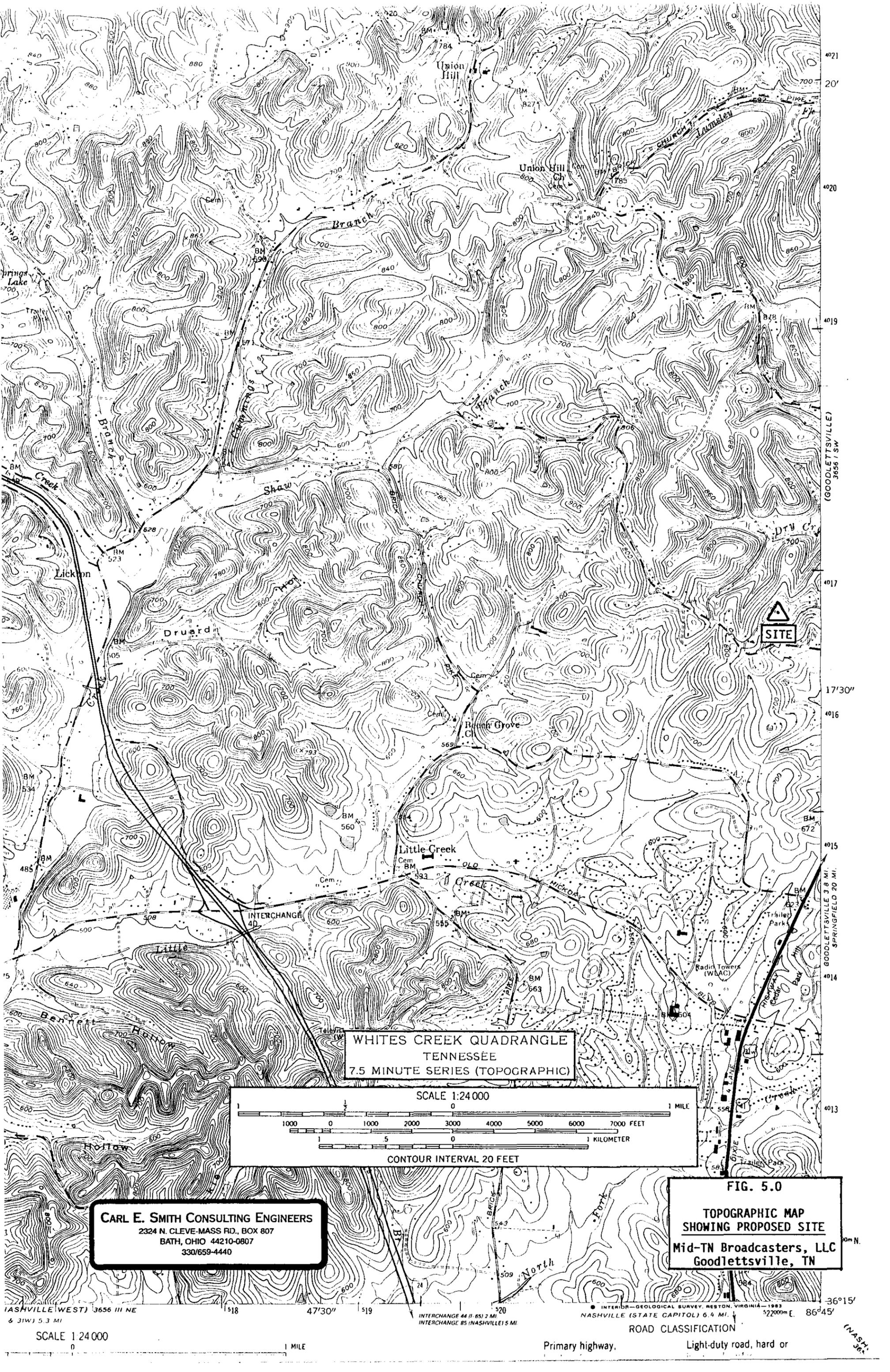
MId-TN Broadcasting, LLC
Goodlettsville, TN

5.0 PROPOSED SITE

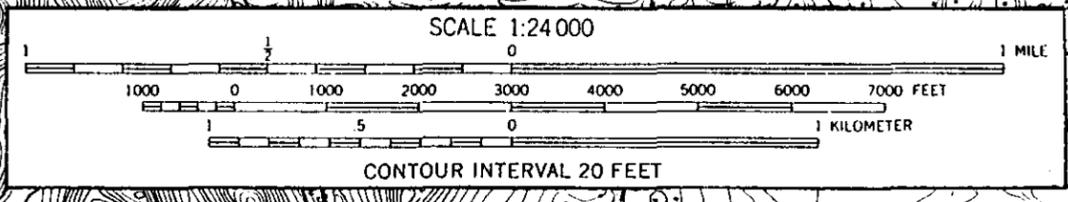
The proposed site is located at 1348 Campbell Road, in Goodlettsville, Davidson County, Tennessee. This site is also the licensed transmitter site of WQQK(FM) - Hendersonville, Tennessee. Figure 5.0 is a topographic map showing the location of this site.

There is one AM broadcast station located within three kilometers of this site - WLAC - Nashville, Tennessee, which operates on 1510 kHz with 50 kilowatts non-directional day and 50 kilowatts directional during nighttime hours. With the exception of WQQK, there are no FM, TV, or nonbroadcast radio facilities within the immediate vicinity of this site which would be impacted by the construction and operation of the proposed facilities. Figure 5.1 is a map exhibit depicting the locations of these nearby radio facilities in relation to the proposed site.

The applicant will comply with the provisions of Section 73.1692 of the FCC Rules to insure that the installation of this taller tower and the proposed antenna will not adversely impact the WLAC nighttime directional pattern. Because of the frequency separation between the proposed facility and WQQK and the proposed vertical separation between these two antennas, it is felt that the possibilities of intermodulation or other such problems occurring between these two facilities will be extremely unlikely. Should such problems be encountered, however, the applicant will take the appropriate steps, including the installation of any required filtering circuitry, to eliminate them.



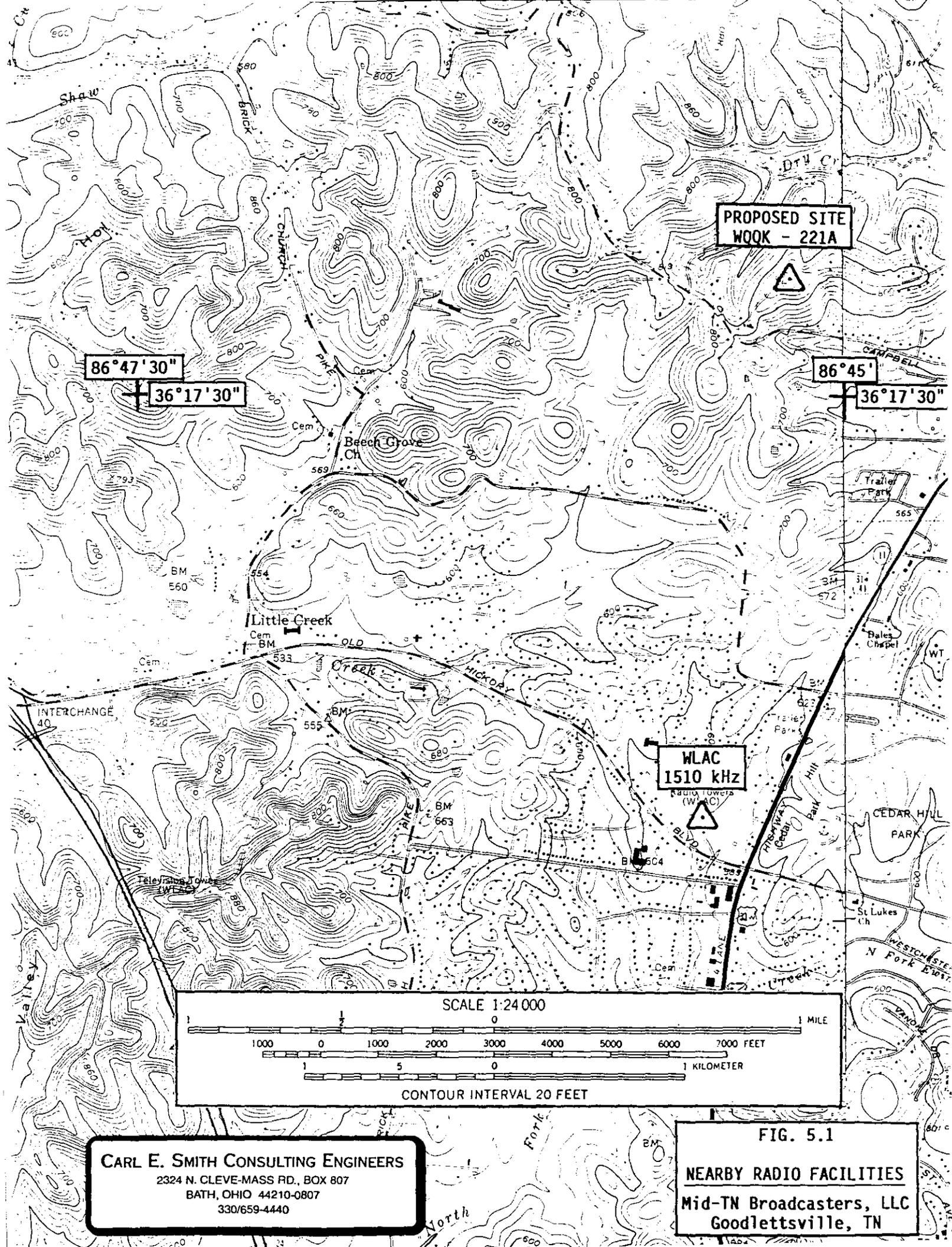
WHITES CREEK QUADRANGLE
 TENNESSEE
 7.5 MINUTE SERIES (TOPOGRAPHIC)



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 BATH, OHIO 44210-0807
 330/659-4440

FIG. 5.0
TOPOGRAPHIC MAP
SHOWING PROPOSED SITE
 Mid-TN Broadcasters, LLC
 Goodlettsville, TN

NASHVILLE (WEST) 3656 III NE & 31W) 5.3 MI
 SCALE 1:24000
 INTERCHANGE 44 (I-85) 2 MI
 INTERCHANGE 85 (NASHVILLE) 5 MI
 ROAD CLASSIFICATION
 Primary highway. Light-duty road, hard or
 NASHVILLE 36°15' 86°45'

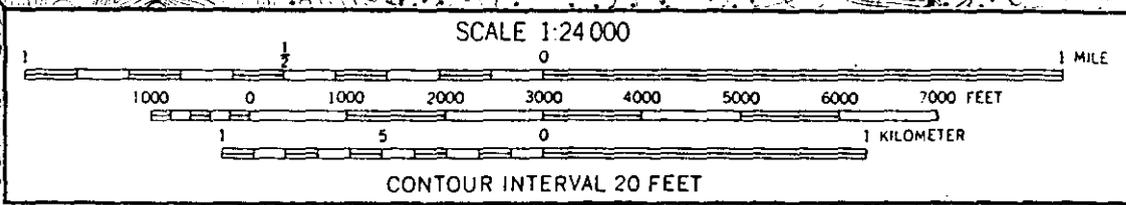


**PROPOSED SITE
WQQK - 221A**

**86°47'30"
36°17'30"**

**86°45'
36°17'30"**

**WLC
1510 kHz**



CARL E. SMITH CONSULTING ENGINEERS
 2324 N. CLEVE-MASS RD., BOX 807
 BATH, OHIO 44210-0807
 330/659-4440

FIG. 5.1
NEARBY RADIO FACILITIES
 Mid-TN Broadcasters, LLC
 Goodlettsville, TN