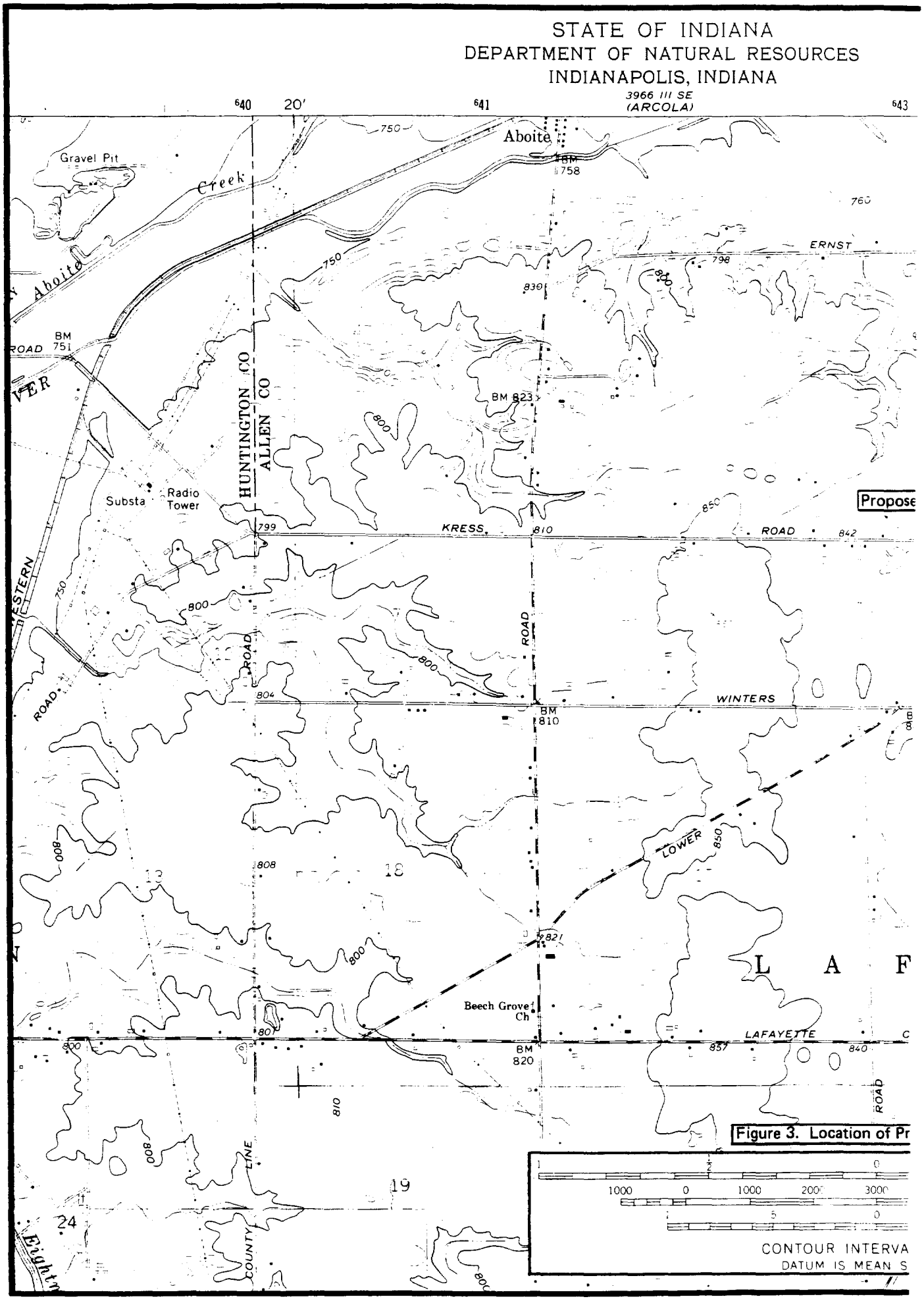
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DEPARTMENT OF NATURAL RESOURCES
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Gravel Pit
Creek
Aboite
ERNST
ROAD
BM 751
HUNTINGTON CO
ALLEN CO
BM 823
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Radio Tower
KRESS
ROAD
842
ROAD
ROAD
ROAD
WINTERS
BM 810
LOWER
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LAFAYETTE
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COUNTY
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Figure 3. Location of Pr
CONTOUR INTERVA
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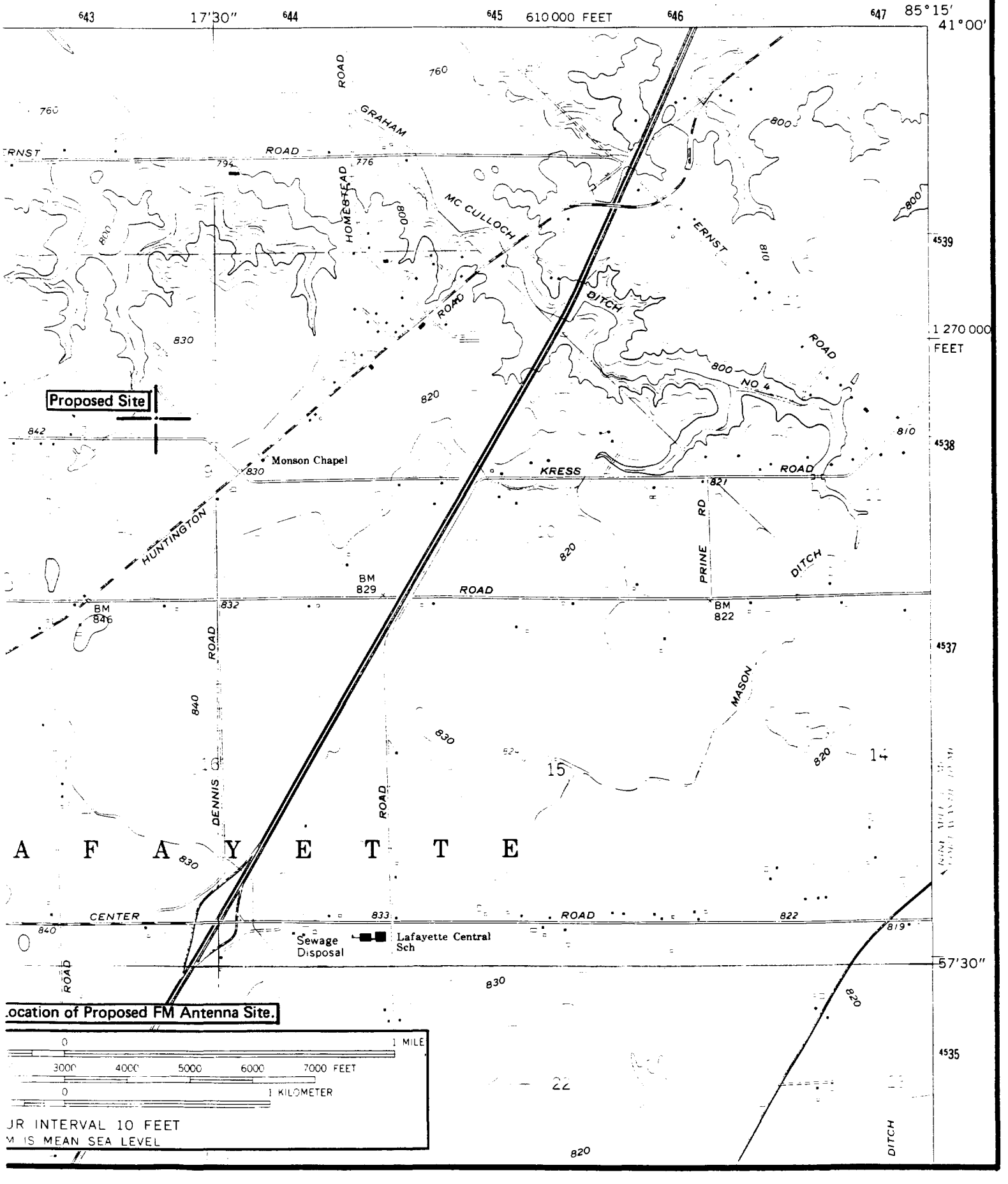
ZANESVILLE QUADRANGLE
INDIANA
7.5 MINUTE SERIES (TOPOGRAPHIC)



Location of Proposed FM Antenna Site.

0 1 MILE
3000 4000 5000 6000 7000 FEET
0 1 KILOMETER

UR INTERVAL 10 FEET
M IS MEAN SEA LEVEL

Table 3
Proposed Directional Antenna Pattern

Bearing (T)	Horizontal and Vertical Polarization Field	Power in kw	Power in dbk
000	0.299	0.089	-10.5
010	0.355	0.126	-9.0
020	0.422	0.178	-7.5
030	0.501	0.251	-6.0
040	0.596	0.355	-4.5
045	0.646	0.417	-3.8
050	0.708	0.501	-3.0
060	0.841	0.708	-1.5
070	0.944	0.891	-0.5
080	1.000	1.000	0.0
090	1.000	1.000	0.0
100	1.000	1.000	0.0
110	1.000	1.000	0.0
120	1.000	1.000	0.0
130	1.000	1.000	0.0
135	1.000	1.000	0.0
140	1.000	1.000	0.0
150	1.000	1.000	0.0
160	1.000	1.000	0.0
170	1.000	1.000	0.0
180	1.000	1.000	0.0
190	1.000	1.000	0.0
200	1.000	1.000	0.0
210	0.944	0.891	-0.5
220	0.841	0.708	-1.5
225	0.767	0.589	-2.3
230	0.708	0.501	-3.0
240	0.596	0.355	-4.5
250	0.501	0.251	-6.0
260	0.422	0.178	-7.5
270	0.355	0.126	-9.0
280	0.299	0.089	-10.5
290	0.251	0.063	-12.0
300	0.211	0.045	-13.5
310	0.178	0.032	-15.0
315	0.178	0.032	-15.0
320	0.178	0.032	-15.0
325	0.178	0.032	-15.0
330	0.178	0.032	-15.0
340	0.211	0.045	-13.5
350	0.251	0.063	-12.0

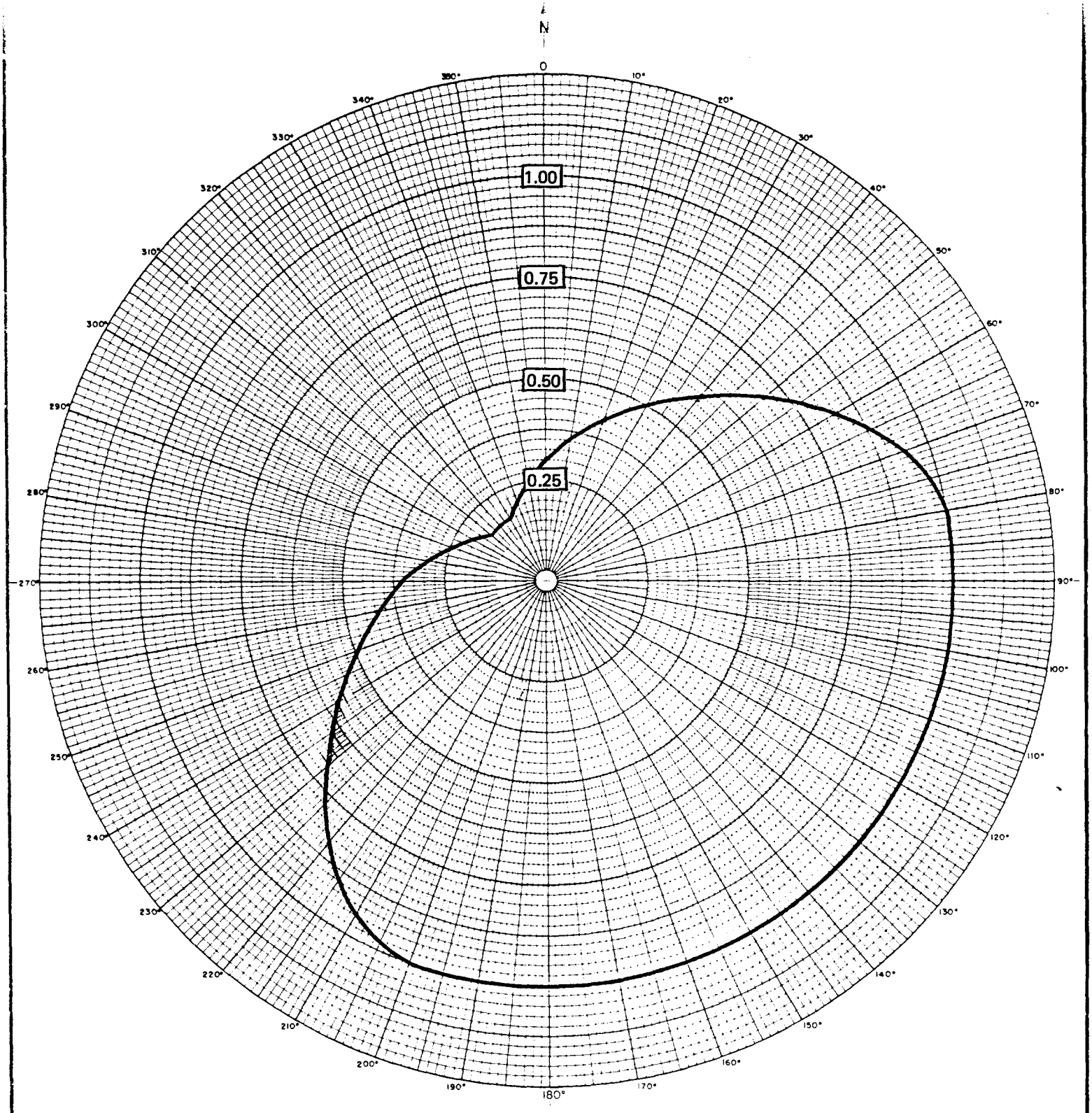


Figure 4. Proposed Directional Antenna Field Pattern for Both Horizontal and Vertical Polarization.

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19 Bolas Road Duxbury, Massachusetts 02332
Telephone (617) 585-9200

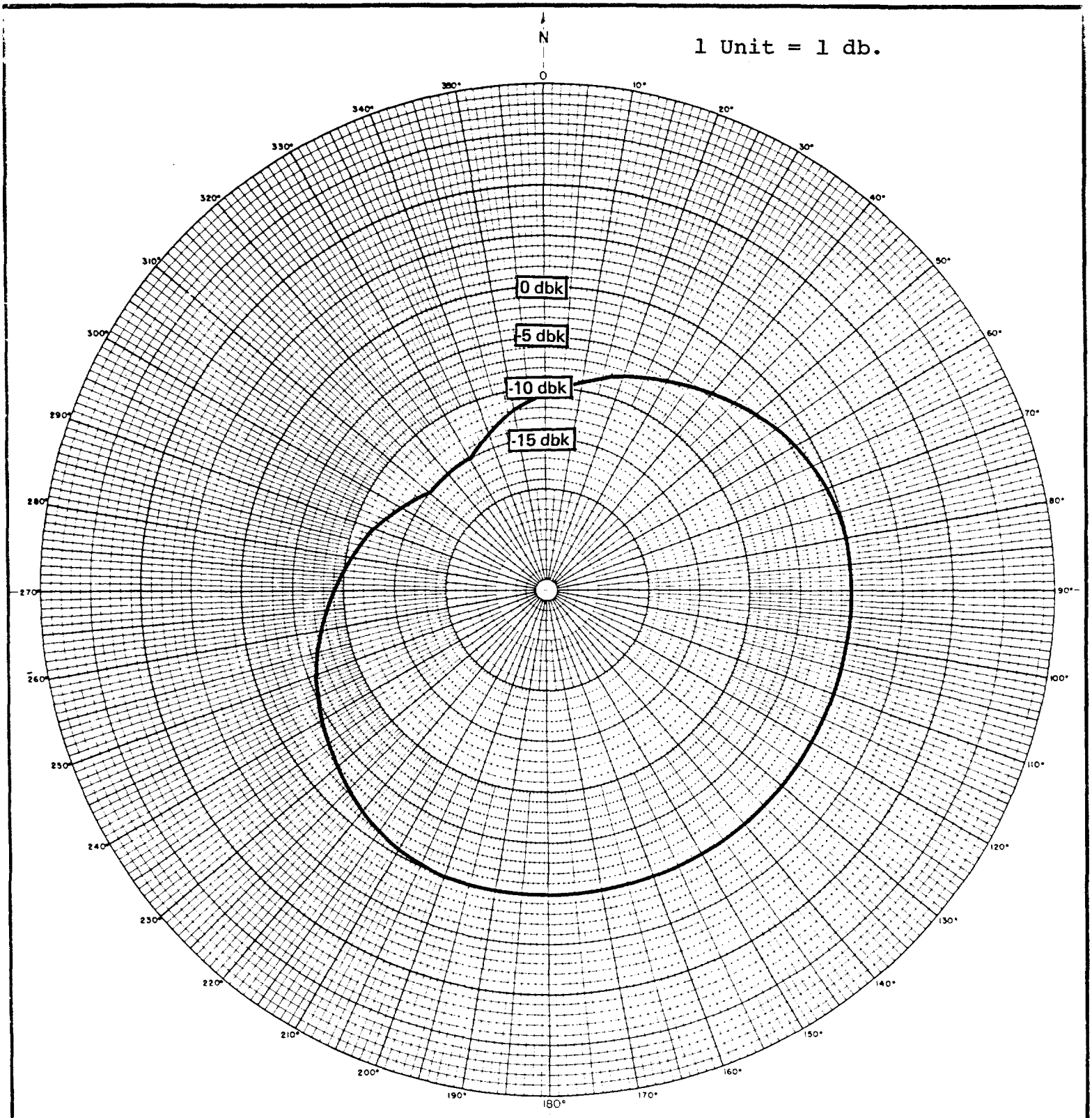

Figure 5. Proposed Directional Antenna Power Pattern in Dbk for Both Horizontal and Vertical Polarization.

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19 Bolas Road Duxbury, Massachusetts 02332
Telephone (617) 585-9200

ELEVATION PATTERN DATE: FEBRUARY 9, 1990 BEAM TILT= 0%
6813-3DA NULL FILL= 0%

PLOT PREPARED FOR: HOMESTEAD H. S. FREQ: 91.1 mHz

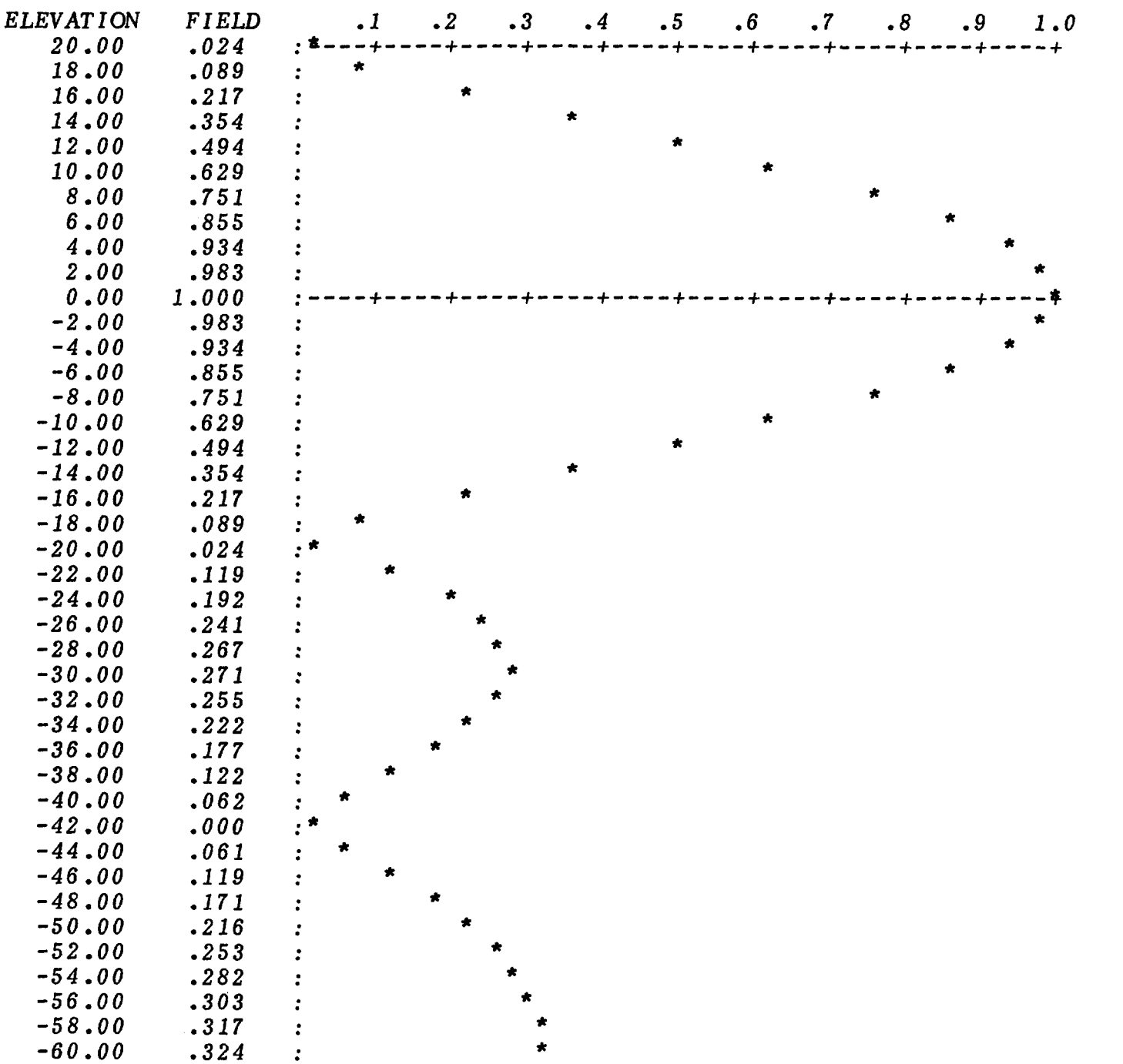

Figure 4. Vertical Radiation Pattern for Proposed 3-Bay Directional FM Antenna.

SECTION VI – EQUAL EMPLOYMENT OPPORTUNITY PROGRAM

1. Does the applicant propose to employ five or more full-time employees? ☐ Yes ☒ No

If Yes, the applicant must include an EEO program called for in the separate Broadcast Equal Employment Opportunity Program Report (FCC 396-A).

SECTION VII – CERTIFICATION

1. Has or will the applicant comply with the public notice requirements of 47 C.F.R. Section 73.3580? ☒ Yes ☐ No

The APPLICANT hereby waives 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 requests an authorization in accordance with this application. *(See Section 304 of the Communications Act of 1934, as amended.)*

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

In accordance with 47 C.F.R. Section 1.65, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND IMPRISONMENT. U.S. CODE, TITLE 18, SECTION 1001.

I certify that the statements in this application are true and correct to the best of my knowledge and belief, and are made in good faith.

Name of Applicant	Title
SOUTHWEST ALLEN COUNTY SCHOOLS	SUPERINTENDENT OF SCHOOLS
Signature: Dave Hales	Date: FEBRUARY 12, 1990

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The principal purpose for which the information will be used is to determine if the benefit requested is consistent with the public interest. The staff, consisting variously of attorneys, analysts, engineers and applications examiners, will use the information to determine whether the application should be granted, denied, dismissed, or designated for hearing. If all the information is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Accordingly, every effort should be made to provide all necessary information. Your response is required to obtain the requested authority.

Public reporting burden for this collection of information is estimated to vary from 76 to 80 hours with an average of 78 hours 04 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Office of Managing Director, Washington, D.C. 20554, and to the Office of Management and Budget, Paperwork Reduction Project (3060-0034), Washington, D.C. 20503.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

08 FEB 1991

IN REPLY REFER TO:

8920-DHT

Mr. Robert S. Warner
Homestead High School
4310 Homestead Road
Fort Wayne, IN 46804

In re: New FM, Lafayette Township, IN
Southwest Allen County Schools
BPED-900215MC

Dear Mr. Warner:

This letter refers to the above-captioned application for a construction permit for a new noncommercial educational FM broadcast station.

Your application proposes a directional transmitting antenna for the apparent purpose of preventing prohibited overlap of protected and interfering contours with WGCS(FM-ED), Goshen, Indiana, which operates on the same channel (Channel 216, 91.1 MHz). A study performed by the FM Branch staff finds that your proposed 60 dBu protected contour would overlap WGCS's 40 dBu interfering contour, in violation of 47 CFR § 73.509. The predicted overlap area would be up to 1.1 kilometers deep and would extend along an arc from 283 degrees clockwise to 16 degrees (azimuths referenced to True North from your proposed transmitter site). This violation was not addressed in your application.[1]

Accordingly, in view of the foregoing, your application is unacceptable for filing pursuant to 47 CFR § 73.3566(a) and IS HEREBY RETURNED. This action is taken by authority delegated pursuant to 47 CFR § 0.283.

Please be aware that, under the terms of the Commission's Public Notice entitled Commission States Future Policy on Incomplete and Patently Defective AM and FM Construction Permit Applications, 56 RR 2d 776, 49 Fed. Reg. 47331 (1984), the Commission indicated it would reinstate applications nunc pro tunc where the original application was dismissed and where a request to reinstate the application (accompanied by a relatively minor curative amendment) is filed within 30 days of the date of return. Any request for reinstatement made under this policy must be submitted in triplicate, be signed in the same manner as the original application, and should contain a copy of this letter to ensure proper processing.

Sincerely,

Dennis Williams
Chief, FM Branch
Audio Services Division
Mass Media Bureau

cc: Edward Perry, Jr.

---

[1] The alleged absence of overlap in the application may be due to an incorrect distance for WGCS's 40 dBu interference contour. See the paragraph immediately preceding Table 2 on page 3 of the Engineering Exhibit. The correct distance for 8.7 dBk (7.4 kW) at 18 m HAAT (defaulting to 30 m minimum HAAT) is 73.4 km rather than 72.4 km.

RICHARD G. LUGAR
INDIANA

SH 306 SENATE OFFICE BUILDING
WASHINGTON, DC 20510
202-224-4814

PRB
state p+b

COMMITTEES:
FOREIGN RELATIONS
AGRICULTURE, NUTRITION, AND FORESTRY

United States Senate

WASHINGTON, DC 20510-1401

2575

August 27, 1991

Ms. Linda Townsend Solheim
Director
Office of Legislative Affairs
Federal Communications Commission
1919 M Street
Washington, D.C. 20554

Dear Ms. Townsend Solheim:

I am writing you on behalf of Senator Lugar's consitutent, Mr. Boo Warner who has sought our assistance in obtaining the present status of FCC application 900 215 MCC, which was resubmitted in February 1991, by the Southwest Allen County School system in Fort Wayne, Indiana.

Your review of this matter and response directly to Mr. Warner with a copy to Senator Lugar would be greatly appreciated. You may direct your response to Mr. Warner at Southwest Allen County Schools, 4310 Homestead Road, Fort Wayne, Indiana 46804, (219) 434-2525.

Thank you for your attention to this matter. Should you have any questions or comments regarding this correspondence, please contact me at the Office of Senator Lugar, 1180 Market Tower, 10 West Market Street, Indianapolis, Indiana 46204, (317) 226-5555.

Sincerely,

Louis Lopez

Louis Lopez
Assistant State Director

5

RECEIVED

Southwest Allen County Schools

4510 Homestead Road, Fort Wayne, Indiana 46804

Telephone (219) 436-6000 FAX (219) 436-0462

MAR - 5 1991

Federal Communications Commission
Office of the Secretary

Dr. Dave Hales, *Superintendent*

Dr. Toni R. Kring, *Assistant Superintendent*

J. Mike Metzcar, CPA, MBA *Business Manager*

ORIGINAL

Posted SW

February 25, 1991

Pet. for Recon

MAR 6 10 38 AM '91
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Amendment:

Pursuant to the commission's letter dated February 8, 1991 (reference 8920-DHT). We are herewith resubmitting application BPED-900215MC together with a curative technical amendment to resolve the prohibited overlays of contours noted in the Commission's letter.

Please process nunc pro tunc its' original tender date.

Respectfully submitted,

Dave Hales

Dr. David Hales

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MAR 06 1991

M EXAMINER

Our Goal Is To Make A Difference

EDUCATIONAL FM ASSOCIATES • 19 Bolas Road • Duxbury, Massachusetts 02332
Telephone: (617) 585-9200

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ENGINEERING AMENDMENT

MAR - 5 1991

Federal Communications Commission
Office of the Secretary

On February 8, 1991 the Commission by letter (Ref. 8920-DHT) returned application BPED-900215MC tendered by the Southwest Allen County Schools noting that the application proposed a prohibited overlap of contours. A copy of the Commission's letter is included as part of this amendment.

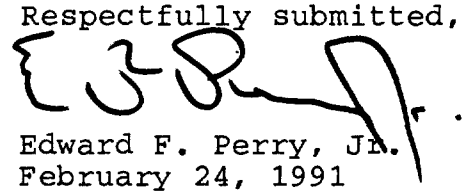
The Commission's study indicated we had miscalculated the distance to the 40 dbu contour of co-channel station WGCS and that the distance to the contour should have been 73.2 km. rather than the 72.3 km. we originally showed. This resulted in a an overlap of up to 1.1 kilometer between the proposed 60 dbu service contour and the WGCS 40 dbu interference contour.

The instant amendment reduces the proposed power from 1,000 watts to 400 watts and reduces the reach of the proposed 60 dbu service contour on bearings toward WGCS by at least 1.2 kilometers thus eliminating any possibility of prohibited overlap. No change in antenna pattern is proposed.

The reduced power will result in a reduction in the proposed 60 dbu service area of 163.9 square kilometers representing 35.8% of the 457.7 square kilometer service area originally proposed. This amendment therefore represents a "minor change" under the Commiossion's FM Processing Rules. No new local Public Notice is required and the application will retain its present file number and its position in the FM Processing Line.

All pages in the original engineering exhibit which change as a result of the reduction in proposed power are included as part of this amendment. Also included is a copy of the FAA determination demonstrating that the proposed antenna tower will not be a hazard to air navigation.

Respectfully submitted,



Edward F. Perry, Jr.
February 24, 1991

SECTION V-B – FM BROADCAST ENGINEERING DATA (Page 2)

4. Does the application propose to correct previous site coordinates? ☐ Yes ☒ No
If Yes, list old coordinates. NOT APPLICABLE

Latitude ° ' "	Longitude ° ' "

5. Has the FAA been notified of the proposed construction? ☒ Yes ☐ No
If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available.

Exhibit No. 1

Date FEBRUARY 9, 1990 Office where filed GREAT LAKES REGIONAL OFFICE

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway. NONE

	Landing Area	Distance (km)	Bearing (degrees True)
(a)			
(b)			

7. (a) Elevation: *(to the nearest meter)*

(1) of site above mean sea level; 250 meters

(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 60 meters

(3) of the top of supporting structure above mean sea level [(aX1) + (aX2)] 310 meters

(b) Height of radiation center: *(to the nearest meter)* H = Horizontal; V = Vertical

(1) above ground 57 meters (H)
57 meters (V)

(2) above mean sea level [(aX1) + (bX1)] 307 meters (H)
307 meters (V)

(3) above average terrain 65 meters (H)
65 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(b)(3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator.

Exhibit No. FIGURE 1

9. Effective Radiated Power:
(a) ERP in the horizontal plane (MAXIMUM ON ANY BEARING) 0.400 kw (H*) 0.400 kw (V*)

(b) Is beam tilt proposed? ☐ Yes ☒ No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field. N/A kw (H*) N/A kw (V*)

Exhibit No. N/A

*Polarization

10. Is a directional antenna proposed? [X] Yes [ ] No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of horizontally and vertically polarized radiated components in terms of relative field. Exhibit No. ENG.

11. Will the main studio be located within the 70 dBu or 3.16 mV/m contour? [X] Yes [ ] No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125. Exhibit No. N/A

12. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast *(except citizens band or amateur)* radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference? [ ] Yes [X] No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. *(See 47 C.F.R. Sections 73.315(b), 73.316(d) and 73.318.)* Exhibit No. ENG.

13. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction D for Section V. Further, the map must clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers. Exhibit No. FIGURE 3

14. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers: CHICAGO SECTIONAL AERONAUTICAL CHART Exhibit No. FIGURE 2

(a) the proposed transmitter location, and the radials along with profile graphs have been prepared;

(b) the 1 mV/m predicted contour and, for noncommercial educational applicants applying on a commercial channel, the 3.16 mV/m contour; and

(c) the legal boundaries of the principal community to be served. SEE FIGURE 2A, A PORTION OF THE INDIANA MCD U.S. CENSUS MAP.

15. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 293.8 sq. km. Population 22,352 Persons.

16. Attach as an Exhibit a map *(Sectional Aeronautical charts where obtainable)* showing the present and proposed 1 mV/m (60 dbu) contours. Exhibit No. FIGURE 2

Enter the following from Exhibit above:

Gain Area ------- sq. XXX KM.

Loss Area 163.9 sq. XXX km.

Percent change (gain area plus loss area as percentage of present area) 35.8 %.

If 50% or more this constitutes a major change. Indicate in question 2(c), Section I, accordingly.

17. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No. N/A

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license. See 47 C.F.R. Section 73.1675. (File No.: N/A)

18. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313).*

Source of terrain data: *(check only one box below)*

[X] Linearly interpolated 30-second database [ ] 7.5 minute topographic map

(Source: DATAWORLD TERP COMPUTER PROGRAM)

[ ] Other *(briefly summarize)*

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances to the 1 mV/m contour (kilometers)	RADIATED POWER (DBK)
0	54.3	5.9	-5.9
45	77.4	10.3	-7.8
90	69.9	12.2	-4.0
135	63.2	11.7	-4.0
180	63.2	11.7	-4.0
225	72.2	10.9	-6.3
270	61.7	6.8	-13.0
315	56.6	4.7	-19.0

Allocation Studies

(See Subpart C of 47 C.F.R. Part 73)

19. Is the proposed antenna location within 320 kilometers (199 miles) of the common border between the United States and Mexico? [ ] Yes [X] No

If Yes, attach as an Exhibit a showing of compliance with all provisions of the Agreement between the United States of America and the United Mexican States concerning Frequency Modulation Broadcasting in the 88 to 108 MHz band.

Exhibit No. N/A

EDUCATIONAL FM ASSOCIATES • 19 Bolas Road • Duxbury, Massachusetts 02332
Telephone: (617) 585-9200

ENGINEERING EXHIBIT
(Amended Pages - February 25, 1991)

1. INTRODUCTION

Educational FM Associates prepared this Engineering Exhibit to support an application by the Southwest Allen County Schools requesting a Construction Permit for a new non-commercial FM broadcast station to operate on FM Channel 216A at Lafayette Township, Indiana. As illustrated herein, the proposed facilities are in full compliance with all applicable FCC allocation rules and policies and material contained in this Exhibit is fully responsive to Section V-B of FCC Form 340. For the sake of clarity, figures and tables contained herein are referenced as such rather than as separate exhibits.

2. FACILITIES REQUESTED

The proposed station will operate on FM Channel 216A, 91.1 MHz, using a directional antenna to protect against interference from co-channel station WGCS at Goshen, Indiana. The station will operate with a maximum effective radiated power of 0.4 kilowatt for both horizontal and vertical polarization from an antenna radiation center located 65 meters above average terrain.

commercial channels was based on the requirements of Section 73.207 of the Rules. Table 1 illustrates the distance to all pertinent facilities and demonstrates complete compliance with all allocation rules.

Table 1
Detailed Allocation Study

Channel	Station	Location	Distance in Kilometers	
			Actual	Required
215B	App.	Galesburg, MI	146.5	115
216A	WEDN	Indianapolis, IN	145.1	115
216A	WPCJ	Pittsford, MI	121.5	115
216B1	WGCS	Goshen, IN	78.4	78.3
218A	WJHS	Columbia City, IN	26.5	25.7
269A	WEZV	Fort Wayne, IN	21.5	10

Note: Required separations shown are based on contours produced by the proposed station at the power specified in Table 3 and at the HAAT given in Paragraph 18, Section V-B, FCC Form 340 and on the following technical assumptions for the other stations involved.

For WEDN, WPCJ, WEZV, and the Channel 215B Galesburg, MI application: Class A to A or Class A to B spacing per Section 73.207. This represents "worst case" assumptions.

For WJHS: +4.2 dbk erp at a "worst case" HAAT of 79 meters. WJHS 60 dbu = 20.9 km. Proposed 80 dbu = 4.8 km. maximum on any bearing.

For WGCS: +8.7 dbk erp at 18 m. HAAT on the direct bearing toward the proposed site. 40 dbu = 73.4 km. Please refer to Table 2 for full information regarding the location of the proposed 60 dbu contour on bearings toward WGCS.

Table 2
Location of Proposed 60 dbu Contour

Bearing(T)	Power in dbk	HAAT (m.)	60 dbu (km.)
270	-13.0	61.7	6.8
280	-14.5	61.0	6.2

Table 2 (Continued)
Location of Proposed 60 dbu Contour

Bearing(T)	Power in dbk	HAAT (m.)	60 dbu (km.)
290	-16.0	60.0	5.7
300	-17.5	59.1	5.2
310	-19.0	58.5	4.8
315	-19.0	57.9	4.7
320	-19.0	57.3	4.7
325	-19.0	56.6	4.7
330	-19.0	56.7	4.7
340	-17.5	56.1	5.1
350	-16.0	55.2	5.5
000	-14.5	54.3	5.9
010	-13.5	59.4	6.7
020	-11.5	64.6	7.6

Note: The Dataworld TERP terrain program was used to determine HAAT for the standard eight bearings and the direct 325 degree true bearing toward WGCS.

As demonstrated in Table 1, this proposal complies with the requirements of Section 73.509 of the Commission's Rules.

6. TELEVISION CHANNEL 6 INTERFERENCE STUDY

Channel 6 television station WRTV-TV in Indianapolis, Indiana is the only television station which requires consideration under Section 73.525 of the Commission's Rules. WRTV-TV is located 142.7 kilometers from the proposed FM site and operates with an erp of +20.0 dbk at a "worst case HAAT of 564 meters producing a 47 dbu Grade B contour which extends a maximum of 126 kilometers on any bearing. Figure 2 in Section 73.525 of the Rules prescribes an undesired-to-desired FM-to-Channel 6 field ratio of 28.0 db to avoid interference at the Grade B contour of a Channel 6 television station from an FM station

operating on Channel 216. The basic interference contour in question here is therefore, the FM 75.0 dbu contour. However, to account for receiving antenna directivity, the Rules provide for a 6 db adjustment in the FM interference contour across an arc 110 degrees either side of the direct line between the FM site and that of the affected Channel 6 television station. The adjusted Channel 6 interference signal is therefore the 81.0 dbu contour. Based on a maximum mixed polarity power (P = H + V/40) of 0.410 kilowatts at a "worst case" HAAT of 72.2 meters, the proposed 81.0 dbu contour extends less than 4.7 kilometers on any bearing. This results in a safety factor of more than ten kilometers with respect to WRTV-TV separating contours which, if they were to overlap, would result in theoretical Channel 6 interference. Since more than adequate Channel 6 protection is demonstrated here mathematically, it is unnecessary to submit maps showing the actual location of contours.

7. DIRECTIONAL ANTENNA INFORMATION

The directional antenna proposed will be a three-bay circularly polarized unit manufactured by Shively Laboratories, Inc. The directional antenna pattern proposed here is similar to one already manufactured by Shively for another station. Table 3 shows the proposed field and power for every 10 degrees of horizontal azimuth for both horizontal and vertical polarization. Figures 4 and 5 illustrate the directional field and power

patterns proposed. Figure 6 is a plot of the vertical radiation characteristics of the proposed antenna. The patterns shown comply with the provisions of the Commission's Rules in that the maximum-to-minimum power ratio of the antenna does not exceed 15 db nor does the proposed power change by more than 2.0 db across any ten degrees of horizontal azimuth. The proposed antenna will be custom fabricated for the applicant by the manufacturer. As a result, all of the electrical specifications such as maximum and rms gain for both horizontal and vertical polarization are not currently available. However, pursuant to accepted practice, these electrical parameters will be determined by the manufacturer prior to the time the antenna is actually installed. All required technical information will be submitted as part of an application for a new station license on FCC Form 302.

8. COMPLIANCE WITH FCC NON-IONIZING RADIATION GUIDELINES

The proposed antenna will be side-mounted on the tower at a point where the antenna radiation center will be 57 meters above ground level. The proposed station will operate with a maximum combined power for both horizontal and vertical polarization of 0.80 kilowatt. OST Bulletin Number 65, published in October, 1985 by the Federal Communications Commission Office of Science and Technology entitled "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation"

specifies several ways in which compliance with the FCC Guidelines can be tested. Here, Table 1 in Appendix B to the Bulletin indicates that the antenna radiation center for a 2.00 kilowatt FM station could be within approximately 13 meters from the nearest area where prolonged human exposure to radio frequency fields would be expected to occur. In the instant case it is clear that no violation of the guidelines would occur with respect to persons on the ground. A person climbing the tower might violate the guidelines. Hence access to the tower itself will be restricted and signs will be erected at the base of the tower warning of potentially dangerous radio frequency fields in the immediate area of the FM antenna. No maintenance will be performed on the tower or antenna system while r.f. power is being supplied to the antenna from the transmitter. The proposed facilities therefore comply with the Commission's Non-Ionizing Radiation Guidelines.

9. AREA AND POPULATION

The population and area to be served by the proposed 60 dbu contour was calculated using the corrected 1980 U.S. Census figures and assuming a uniform distribution of population within minor civil divisions. This study indicates that the proposed facilities will serve a 60 dbu population of 22,249 persons and a total of 293.8 square kilometers will be included within the proposed 60 dbu contour.

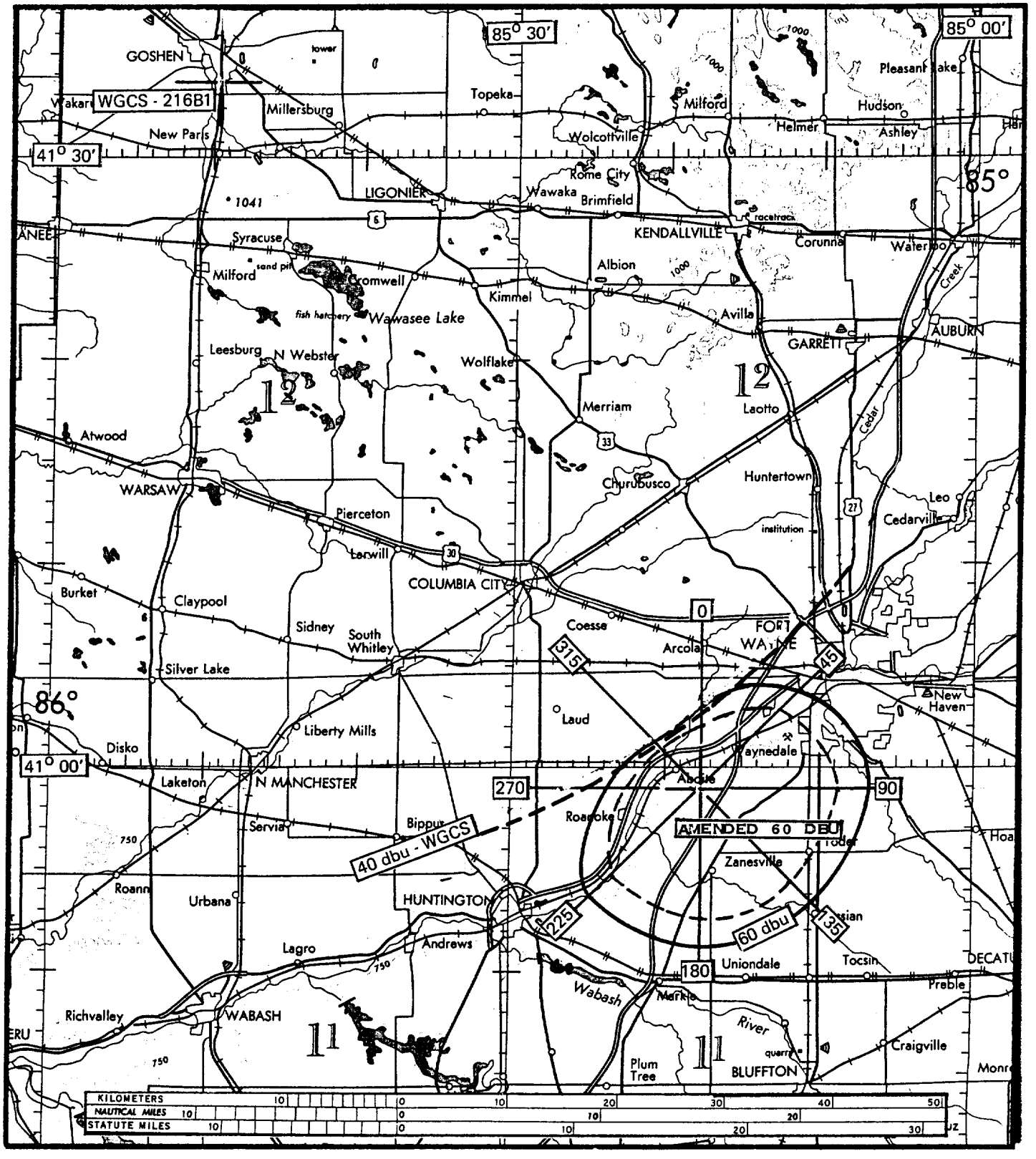


Figure 2. Detailed Allocation Study and 60 dbu Contour.

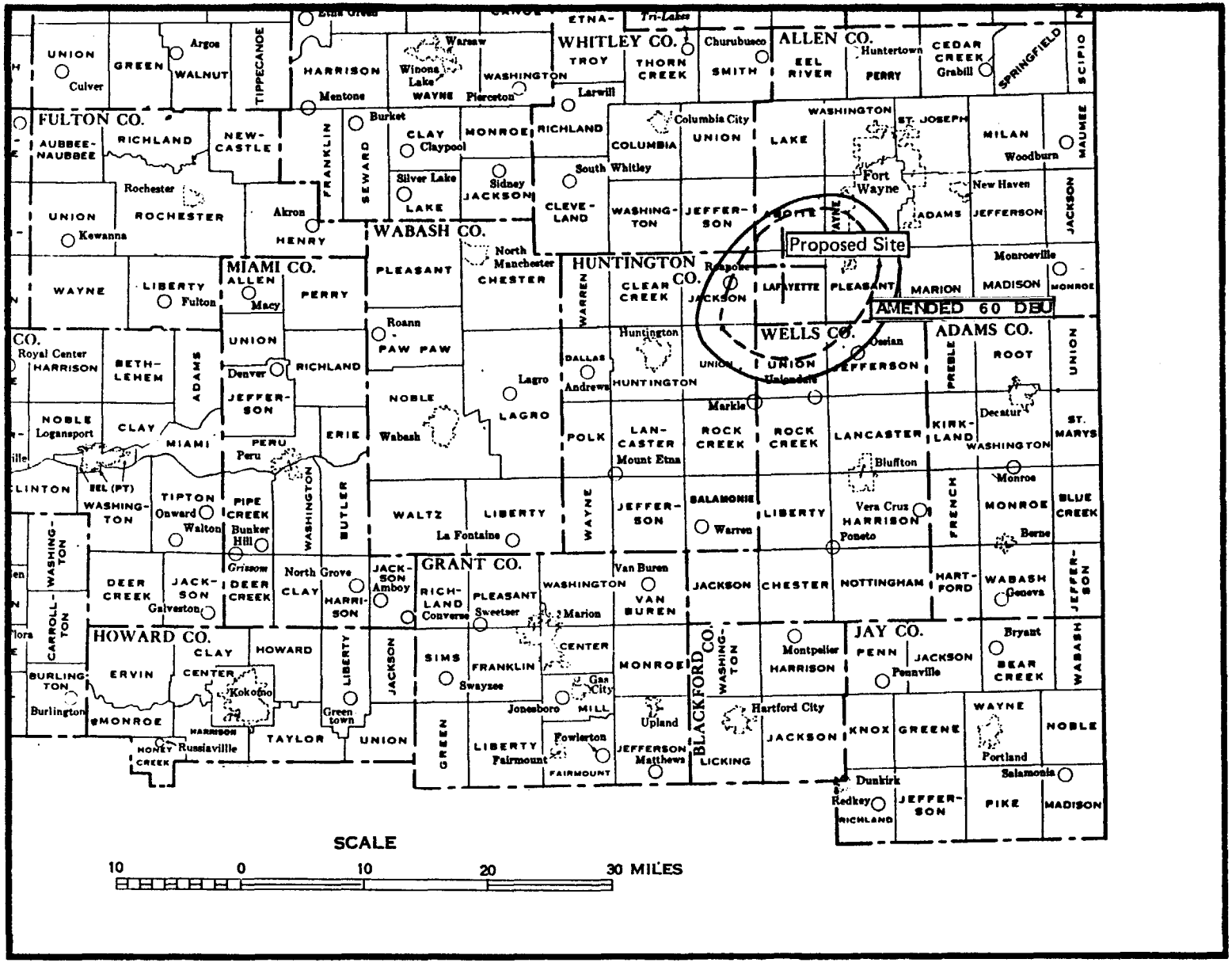


Figure 2A. Location of Proposed Site and 60 dbu Contour on a U.S. Census Map.

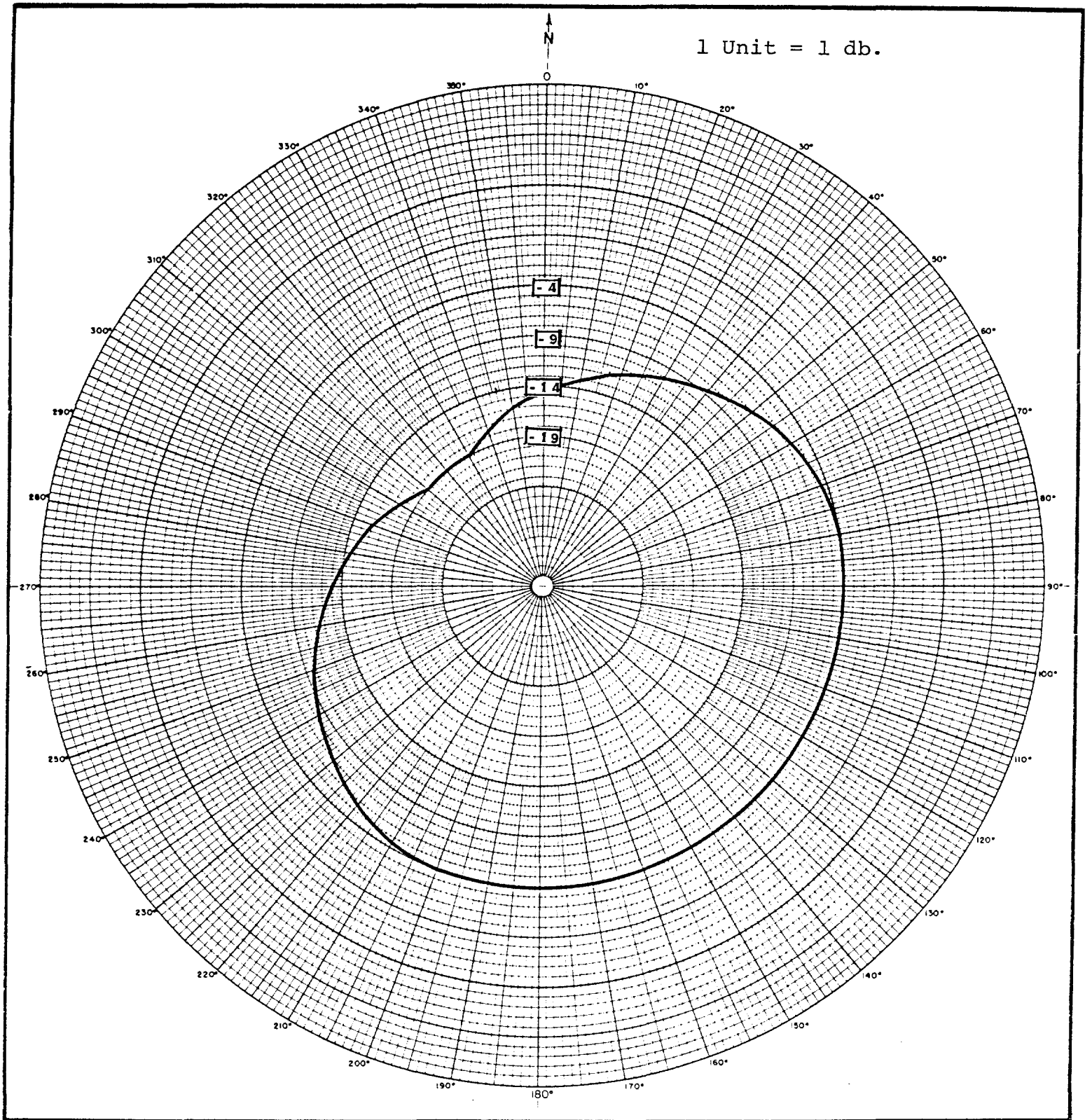


Figure 5. Proposed Directional Antenna Power Pattern in Dbk for Both Horizontal and Vertical Polarization.

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Table 3
Proposed Directional Antenna Pattern

		Horizontal and Vertical Polarization	
Bearing (T)	Field	Power in kw	Power in dbk
000	0.299	0.035	-14.5
010	0.355	0.050	-13.0
020	0.422	0.071	-11.5
030	0.501	0.100	-10.0
040	0.596	0.141	-8.5
045	0.646	0.166	-7.8
050	0.708	0.200	-7.0
060	0.841	0.282	-5.5
070	0.944	0.355	-4.5
080	1.000	0.400	-4.0
090	1.000	0.400	-4.0
100	1.000	0.400	-4.0
110	1.000	0.400	-4.0
120	1.000	0.400	-4.0
130	1.000	0.400	-4.0
135	1.000	0.400	-4.0
140	1.000	0.400	-4.0
150	1.000	0.400	-4.0
160	1.000	0.400	-4.0
170	1.000	0.400	-4.0
180	1.000	0.400	-4.0
190	1.000	0.400	-4.0
200	1.000	0.400	-4.0
210	0.944	0.355	-4.5
220	0.841	0.282	-5.5
225	0.767	0.234	-6.3
230	0.708	0.200	-7.0
240	0.596	0.141	-8.5
250	0.501	0.100	-10.0
260	0.422	0.071	-11.5
270	0.355	0.050	-13.0
280	0.299	0.035	-14.5
290	0.251	0.025	-16.0
300	0.211	0.018	-17.5
310	0.178	0.013	-19.0
315	0.178	0.013	-19.0
320	0.178	0.013	-19.0
325	0.178	0.013	-19.0
330	0.178	0.013	-19.0
340	0.211	0.018	-17.5
350	0.251	0.025	-16.0