

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TV AMERICAS DE OMAHA, L.L.C., licensee of Low Power Television Station KAZO-LP, Channel 57 in Omaha, Nebraska, in support of this Application for Construction Permit to specify operation on Channel 34 from the licensed KAZO-LP site. This proposal is being submitted in response to the Commission's reclamation of Channel 57 spectrum for future auction, thereby placing this LPTV station in a displacement situation.

It is proposed to mount a standard Andrew omnidirectional antenna at the authorized height on the side of an existing 112-meter communications tower. Exhibit B is a map upon which the predicted service contours are plotted. It is important to note that the newly proposed 74 dBu contour encompasses a significant portion of that which obtains from the licensed KAZO-LP facility. Operating parameters for the proposed facility are tabulated in Exhibit C. A contour overlap analysis and interference study are provided in Exhibit D, and a power density calculation follows as Exhibit E.

Because no change in the overall height or location of the existing tower is proposed, the FAA has not been notified of this application. The FCC issued Antenna Structure Registration Number 1218793 to this tower.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.



KEVIN T. FISHER

July 2, 2004

CONTOUR POPULATION
GRADE A (74 DBU) : 679,304
GRADE B (64 DBU) : 725,160

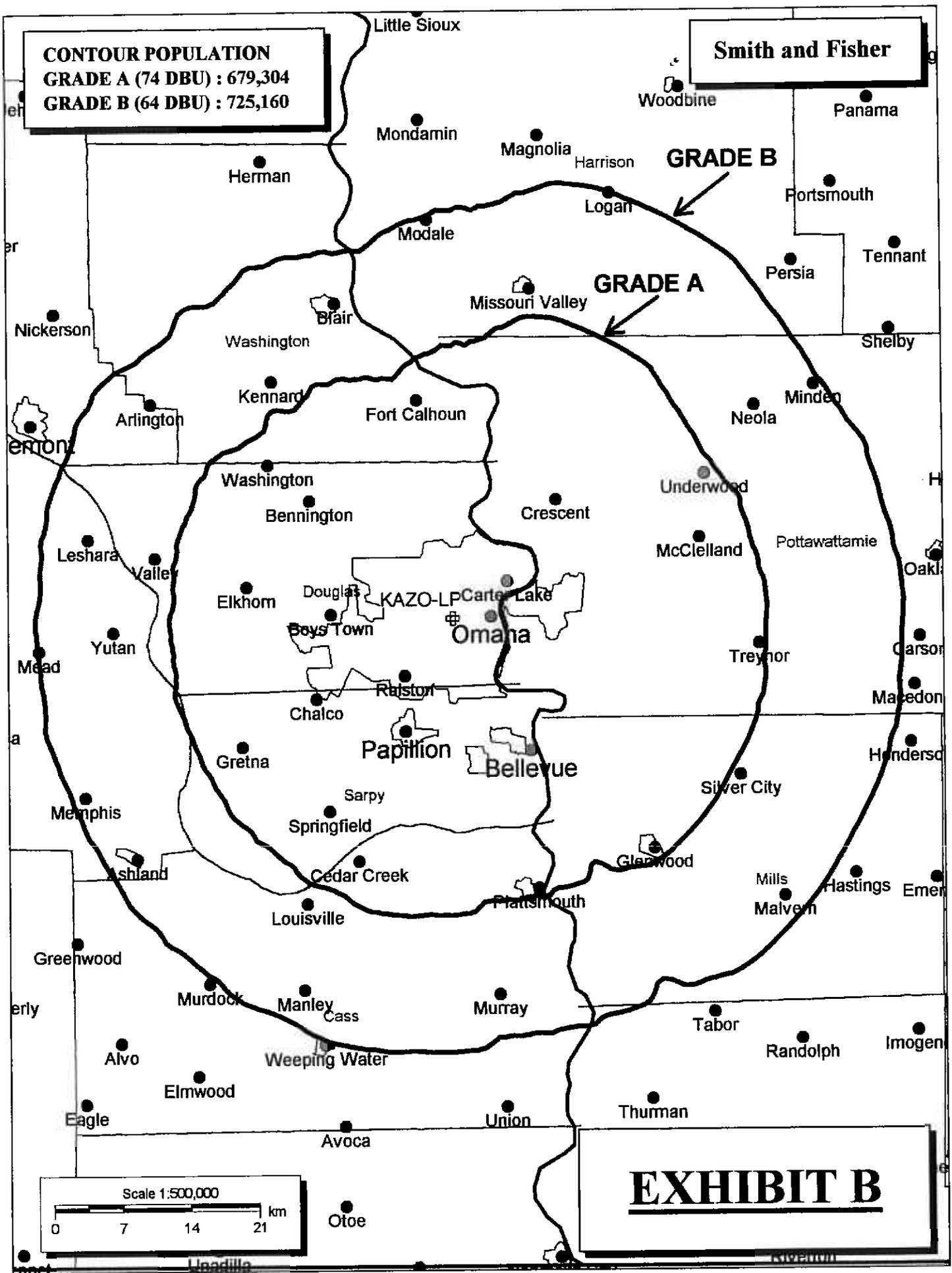
Smith and Fisher

GRADE B

GRADE A

EXHIBIT B

Scale 1:500,000



PROPOSED OPERATING PARAMETERS

PROPOSED KAZO-LP
CHANNEL 34 – OMAHA, NEBRASKA

Transmitter Power Output:	7.8 kw
Transmission Line Efficiency:	68.5%
Antenna Power Gain – Toward Horizon:	9.36
Antenna Power Gain – Main Lobe:	28.2
Effective Radiated Power – Toward Horizon:	50 kw
Effective Radiated Power – Main Lobe:	150 kw
Transmitter Make and Model:	Type-accepted
Rated Output	8 kw
Transmission Line Make and Model:	Andrew HJ12-50
Size and Type:	2-1/4" air heliax
Length:	375 feet
Antenna Make and Model:	Andrew ALP16L2-HSOC
Orientation	Omnidirectional
Beam Tilt	1.5 degrees
Effective Height Above Ground:	107 meters
Effective Height Above Mean Sea Level:	448 meters

CONTOUR OVERLAP AND
LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED KAZO-LP
CHANNEL 34 – OMAHA, NEBRASKA

We conducted a computer analysis of the interference situation for the proposed facility, the results of which are shown in Exhibit D-2. The study is based on contour protection requirements of Sections 74.705, 74.706, and 74.707 of the FCC's Rules with respect to analog full-power, digital full-power, and low power television stations, respectively. It concludes that the facility proposed herein meets these requirements except to seven stations: KSNB-DT, Channel 34 in Superior, Nebraska; KUSD-DT, Channel 34 in Vermillion, South Dakota; K66AR(CP), Channel 34 in Decatur, Nebraska; WDAF-DT, Channel 34 in Kansas City, Kansas; KBIN-DT, Channel 33 in Council Bluffs, Iowa; KHIN-DT, Channel 35 in Red Oak, Iowa; and, K31ED(Appl.), Channel 19 in Omaha, Nebraska.

With regard to the K31ED proposal in Omaha, that is a Channel 19 displacement application filed by MS Communications (BPTTL-20020503ABI). The station is authorized to operate on Channel 31 in Ottumwa, Iowa, over 300 kilometers from the site specified in the Omaha application. This is in direct conflict with the FCC's definition of a minor change proposal, which states that the protected contour (74 dBu in this case) of the proposed facility must overlap some portion of that of the authorized station. The licensee of KAZO-LP opposes the grant of the K31ED proposal and requests the dismissal of that application on the basis that it does not meet the Commission's Rules with regard to its minor-change requirements.

In an abundance of caution, we request a waiver of Section 74.707 of the Commission's Rules, if needed, with regard to interference to the K31ED proposal on channel 19 in Omaha, on the basis that the application is not grantable under the FCC's Rules.

We then conducted detailed interference studies using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to the other facilities of concern. The software utilizes a 2-square kilometer cell size (except where noted), calculates signal strength at 1.0 kilometer increments along each radial studied, and employs the 1990 U.S. Census to count population within cells. In addition, the program does not attribute interference to the proposed facility in cells within the protected contour of the station under study where interference from another source (other than proposed KAZO-LP) already is predicted to exist (also known as "masking"). The results of these studies are provided in Exhibit D-3. They conclude that the facility proposed herein causes no significant new interference to any of the potentially affected stations.

As a result, waivers of Section 74.706 of the Commission's Rules with respect to interference to KSNB-DT, KUSD-DT, WDAF-DT, KBIN-DT and KHIN-DT, and Section 74.707 with regard to K66AR, are requested and believed to be justified based on the aforementioned Longley-Rice studies.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED KAZO-LP
CH. 34 - OMAHA NE

REFERENCE

41 15 26 N
95 59 01 W

LPTV Pwr = 50 kW, HAMS L COR= 447 M

DISPLAY DATES

DATA 06-26-04
SEARCH 06-30-04

..... Channel 34-, 590 MHz

Call	Channel	Location	Dist	Azi	FCC	Margin
KSNB-D CP	34	Superior	NE 208.99	232.1	> 335.84	-126.85
KUSD-D CPM	34	Vermillion	SD 209.85	342.0	> 321.67	-111.82
K66AR CP	34N	Decatur	NE 86.21	344.8	> 187.21	-101.00
WDAF-D CP	34	Kansas City	MO 269.86	153.7	> 333.58	-63.72
KBIN-D CP	33	Council Bluffs	IA 12.41	91.5	> 076.11	-63.70
KHIN-D CP	35	Red Oak	IA 61.72	80.7	> 118.46	-56.74
K31ED AP	19Z	Omaha	NE 12.39	91.2	> 042.83	-30.44
960712 CP	34+	Ames	IA 203.53	65.9	> 189.04	14.49
KXNETV LI	19+	Norfolk	NE 153.12	315.9	> 109.42	43.70
KXNETV CP	19+	Norfolk	NE 153.12	315.9	> 109.26	43.86
AP754 AP	34Z	Ames	IA 217.98	66.1	> 173.61	44.37
K33EM LI	33+	Columbus, Etc.	NE 79.03	281.3	> 026.56	52.47

INTERFERENCE SUMMARY
 PROPOSED KAZO-LP
 CHANNEL 34 – OMAHA, NEBRASKA

<u>Call Sign</u>	<u>Status</u>	<u>City, State</u>	<u>Ch.</u>	<u>Longley-Rice Service Population</u>	<u>Unmasked Interference From Proposed Facility</u>	<u>%</u>
KSNB-DT BPCDT-19991004ABO	CP	Superior, NE	34	152,214	50	<0.1
KUSD-DT BMPEDT-20031007ABV	CP	Vermillion, SD	34	373,272	1,669	0.4
*K66AR BPTTL-20031008ACG	CP	Decatur, NE	34	653	0	0
WDAF-DT BPCDT-19991004ABP	CP	Kansas City, MO	34	2,022,781	101	<0.1
KBIN-DT BPEDT-19980826KE	CP	Council Bluffs, IA	33	731,850	0	0
*KHIN-DT BPEDT-20000327ABE	CP	Red Oak, IA	35	850,407	3,278	0.4

*These studies utilized 1.0-kilometer cell size and 0.1-kilometer increment spacing.

POWER DENSITY CALCULATION

PROPOSED KAZO-LP
CHANNEL 34 – OMAHA, NEBRASKA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Omaha facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 150 kw, an effective antenna height of 107 meters above ground, and the vertical pattern of the Andrew antenna, maximum power density two meters above ground of 0.0044 mw/cm^2 is calculated to occur 24 meters from the base of the tower. Since this is only 1.1 percent of the 0.39 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 34 (590-596 MHz), this proposal may be excluded from consideration with respect to public exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.