

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRINITY BROADCASTING NETWORK, licensee of television translator W59DG, Channel 59 in Elmira, New York, in support of this Application for Construction Permit to specify operation on Channel 24 from the licensed W59DG site. This proposal is being submitted in response to the Commission's reclamation of Channel 59 spectrum for future auction, thereby placing this translator in a displacement situation.

It is proposed to mount a standard Andrew omnidirectional antenna at the authorized height on the side of an existing 131-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 W59DG 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 1053420 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.


KYLE T. FISHER

August 22, 2003

CONTOUR POPULATION
GRADE A (74 DBU) : 69,465
GRADE B (64 DBU) : 105,919

Smith and Fisher

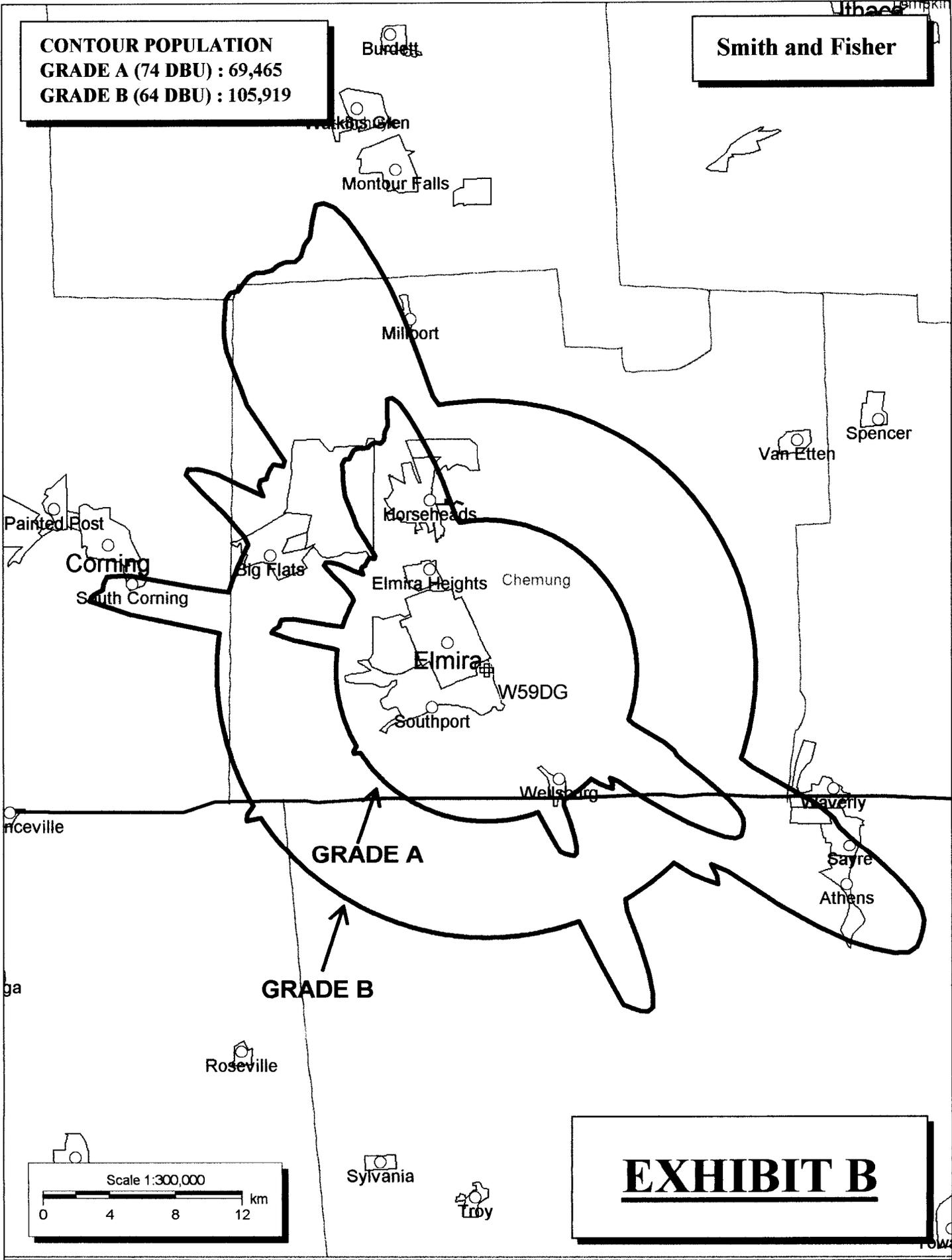


EXHIBIT B

PROPOSED OPERATING PARAMETERS

PROPOSED W59DG
CHANNEL 24 – ELMIRA, NEW YORK

Transmitter Power Output:	1.0 kw
Transmission Line Efficiency:	60.6%
Antenna Power Gain – Toward Horizon:	28.2
Antenna Power Gain – Main Lobe:	28.2
Effective Radiated Power – Toward Horizon:	17.1 kw
Effective Radiated Power – Main Lobe:	17.1 kw
Transmitter Make and Model:	Type-accepted
Rated Output	1.0 kw
Transmission Line Make and Model:	Andrew HJ7-50A
Size and Type:	1-5/8" air heliax
Length:	440 feet
Antenna Make and Model:	Andrew ALP16L2-HSOC
Orientation	Omnidirectional
Beam Tilt	0.5 degrees
Effective Height Above Ground:	130 meters
Effective Height Above Mean Sea Level:	386 meters

CONTOUR OVERLAP AND
LONGLY-RICE INTERFERENCE STUDIES
PROPOSED W59DG
CHANNEL 24 – ELMIRA, NEW YORK

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 five stations: WCNY-TV, Channel 24 in Syracuse, New York; WATM-DT, Channel 24 in Altoona, Pennsylvania; proposed DTV station, Channel 24 in Arcade, New York; W24BB, Channel 24 in East Stroudsburg, Pennsylvania; and, WNYE-DT, Channel 24 in New York, New York.

We then conducted detailed interference studies using the Longley-Rice methodology contained in the Commission's *OET Bulletin No. 69*, with respect to these 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 Trinity's proposed W59DG) 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 74.705 of the Commission's Rules with respect to interference to WCNV-TV, Section 74.706 with regard to WATM-DT, proposed DTV station, and WNYE-DT, and Section 74.707 with respect to W24BB, are requested and believed to be justified based on the aforementioned Longley-Rice studies.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED W59DG
CH. 24 - ELMIRA NY

REFERENCE
42 04 29 N
76 46 47 W

LPTV Pwr = 17.1 kW, HAMS L COR= 386 M

DISPLAY DATES
DATA 08-21-03
SEARCH 08-22-03

..... Channel 24-, 530 MHz

Call	Channel	Location	Dist	Azi	FCC	Margin
WATM-D CP	24	Altoona	PA 217.72	220.2	> 311.71	-93.99
WCNYTV CP	24+	Syracuse	NY 110.90	29.0	> 197.61	-86.71
WCNYTV LI	24+	Syracuse	NY 114.89	32.4	> 201.32	-86.43
LMNEW AP	24	Arcade	NY 107.23	277.7	> 183.28	-76.05
WATM-D ST	24	Altoona	PA 217.72	220.2	> 269.75	-52.03
W24BB LI	24-	East Stroudsburg	PA 157.69	137.3	> 191.60	-33.91
WNYE-D AP	24	New York	NY 276.15	121.4	> 306.02	-29.87
WNYE-D ST	24	New York	NY 280.48	122.4	> 273.98	6.50
WCNY-D CP	25	Syracuse	NY 110.95	29.0	> 096.34	14.61
WCNYTV ALD	25	SYRACUSE	NY 114.89	32.4	> 097.12	17.77
W25AQ LI	25N	Towanda	PA 49.99	150.5	> 027.67	22.32
WCNY-D ST	25	Syracuse	NY 110.90	29.0	> 087.28	23.62
W48AQ CP	24Z	Clarks Summit, E	PA 113.21	126.3	> 085.72	27.49
AL222 AL	24-	Barrie	ON 348.82	318.9	> 316.27	32.55
WUHF LI	31+	Rochester	NY 135.05	331.1	> 100.00	35.05
WUHF CP	31+	Rochester	NY 135.05	331.1	> 100.00	35.05
W24CS LI	24-	Reading	PA 204.90	158.6	> 163.38	41.52
WNPBTV LI	24-	Morgantown	WV 364.68	224.5	> 300.79	63.89

INTERFERENCE SUMMARY

PROPOSED W59DG
CHANNEL 24 – ELMIRA, NEW YORK

<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>
WCNY-TV BPET-20000302AAJ	CP	Syracuse, NY	24	1,172,992	44	<0.1
WCNY-TV BLET-19850912KT	Lic.	Syracuse, NY	24	1,247,171	308	<0.1
WATM-DT BPCDT-19991101AGQ	CP	Altoona, PA	24	748,445	0	0
Prop. DTV BPRM-20000717AFG	Appl.	Arcade, NY	24	1,184,259	0	0
WATM-DT BDSTA-20020925ACV	STA	Altoona, PA	24	338,504	0	0
W24BB BLTTL-1991119JM	Lic.	East Stroudsburg, PA	24	56,311	0	0
WNYE-DT BPEDT-19991110AAQ	Appl.	New York, NY	24	17,614,410	0	0

EXHIBIT E

POWER DENSITY CALCULATION
PROPOSED W59DG
CHANNEL 24 – ELMIRA, NEW YORK

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Elmira facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 17.1 kw, an effective antenna height of 130 meters above ground, and the vertical pattern of the Andrew antenna, maximum power density two meters above ground of 0.00033 mw/cm^2 is calculated to occur 30 meters from the base of the tower. Since this is only 0.1 percent of the 0.35 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 24 (530-536 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.