

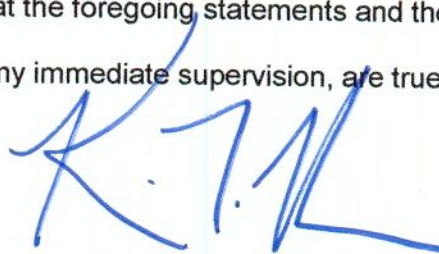
ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRINITY BROADCASTING NETWORK, licensee of television translator W61DE, Channel 61 in Cincinnati, Ohio, in support of this Application for Construction Permit to specify operation on Channel 36 from the licensed W61DE site. This proposal is being submitted in response to the Commission's reclamation of Channel 61 spectrum for future auction, thereby placing this translator in a displacement situation.

It is proposed to mount a standard Andrew directional antenna at the authorized height on the side of an existing 107 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 W61DE 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 1018149 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

December 6, 2004

CONTOUR POPULATION
GRADE A (74 DBU) : 1,475,824
GRADE B (64 DBU) : 1,769,434

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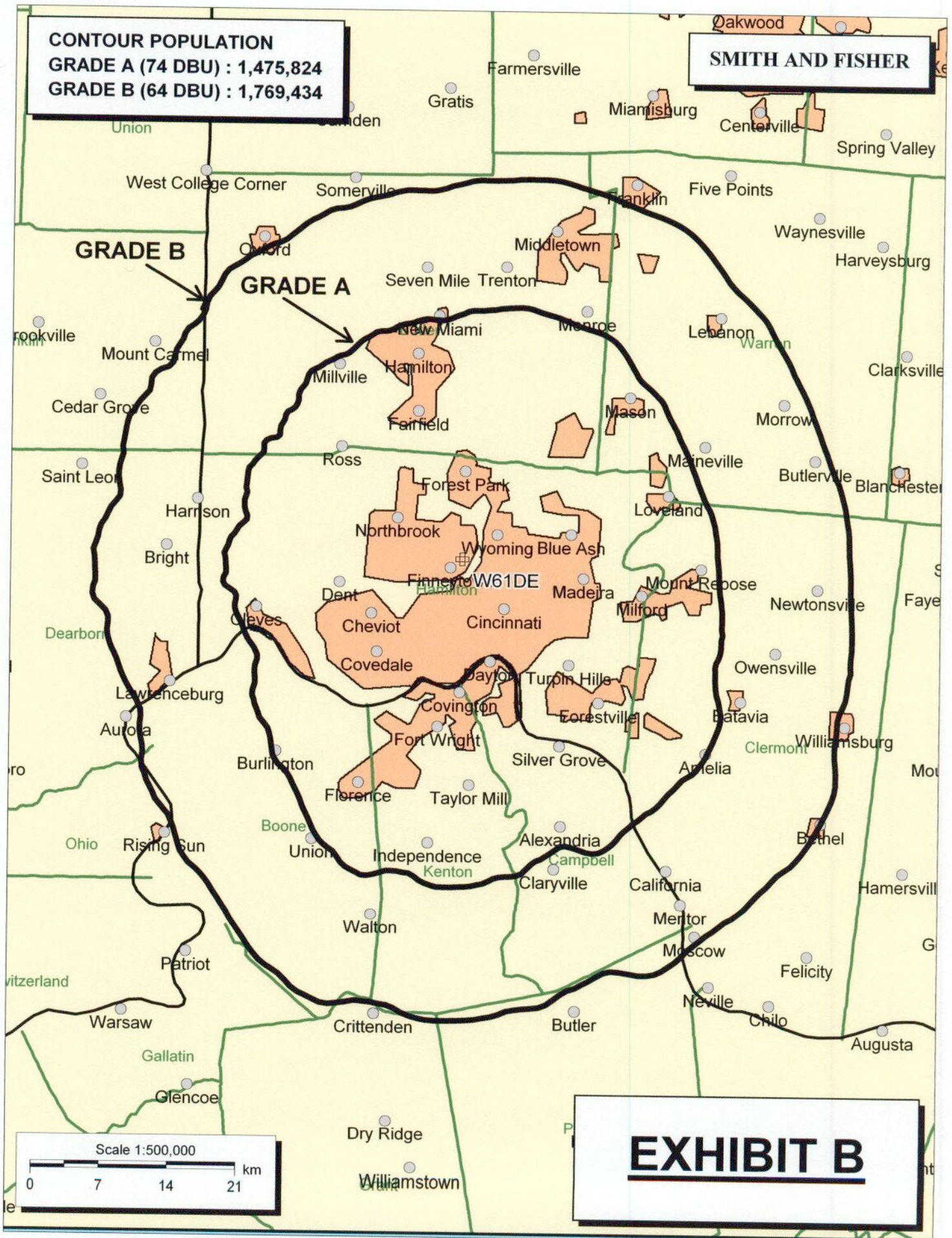


EXHIBIT B

PROPOSED OPERATING PARAMETERS

PROPOSED W61DE
CHANNEL 36 – CINCINNATI, OHIO

Transmitter Power Output:	6.0 kw
Transmission Line Efficiency:	73.2%
Antenna Power Gain – Toward Horizon:	5.09
Antenna Power Gain – Main Lobe:	28.2
Effective Radiated Power – Toward Horizon:	22.4 kw
Effective Radiated Power – Main Lobe:	123.9 kw
Transmitter Make and Model:	Type-accepted
Rated Output	6.0 kw
Transmission Line Make and Model:	Andrew HJ8-50B
Size and Type:	3" air heliax
Length:	330 feet
Antenna Make and Model:	Andrew ALP16L2-HSOC
Orientation	180 degrees true
Beam Tilt	2.0 degrees
Effective Height Above Ground:	91.4 meters
Effective Height Above Mean Sea Level:	355 meters

CONTOUR OVERLAP AND
LONGLEY-RICE INTERFERENCE STUDIES
PROPOSED W61DE
CHANNEL 36 – CINCINNATI, OHIO

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: WTTE-DT, Channel 36 in Columbus, Ohio; WFFT-DT, Channel 36 in Fort Wayne, Indiana; WLWT-DT, Channel 35 in Cincinnati, Ohio; WTVQ-TV, Channel 36 in Lexington, Kentucky; WTWQ-DT, Channel 36 in Terre Haute, Indiana; WKOI-TV, Channel 43 in Richmond, Indiana; and, WKEF(TV), Channel 22 in Dayton, Ohio.

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 W61DE) 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 WTVQ-TV, WKOI-TV and WKEF(TV), and Section 74.706 with regard to WTTE-DT, WFFT-DT, WLWT-DT and WTWO-DT are requested and believed to be justified based on the aforementioned Longley-Rice studies.

SMITH AND FISHER

EXHIBIT D-2

PROPOSED W61DE
CH. 36 - CINCINNATI OH

REFERENCE

39 12 30 N
84 30 25 W

LPTV Pwr = 33.3 kW, HAMS L COR= 355 M

DISPLAY DATES
DATA 11-30-04
SEARCH 12-01-04

..... Channel 36+, 602 MHz

Call	Channel	Location	Dist	Azi	FCC	Margin
WTTE-D CP	36	Columbus	OH	151.16	57.1	> 325.53 -174.37
WFFT-D CP	36	Ft. Wayne	IN	219.05	344.8	> 321.26 -102.21
WLWT-D CPM	35	Cincinnati	OH	9.43	187.7	> 109.12 -99.69
WTVQTV LI	36Z	Lexington	KY	130.71	175.7	> 216.85 -86.14
WTWO-D CPM	36	Terre Haute	IN	249.11	271.8	> 328.11 -79.00
WLWT-D LI	35	Cincinnati	OH	9.43	187.7	> 085.62 -76.19
WKOITV LI	43+	Richmond	IN	35.52	341.9	> 100.00 -64.48
WKEF LI	22+	Dayton	OH	60.71	20.3	> 093.41 -32.70
WNPX-D LI	36	Cookeville	TN	383.68	212.3	> 338.06 45.62
WNPX-D ST	36	Cookeville	TN	383.67	212.3	> 336.86 46.81
WUPW LI	36-	Toledo	OH	286.34	17.9	> 222.00 64.34
WBNA LI	21-	Louisville	KY	169.78	220.1	> 099.26 70.52

INTERFERENCE SUMMARY
 PROPOSED W61DE
 CHANNEL 36 – CINCINNATI, OHIO

<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>
WTTE-DT BPCDT-19991029AGZ	CP	Columbus, OH	36	2,128,078	3,129	0.15
WFFT-DT BPCDT-19991029ADC	CP	Fort Wayne, IN	36	1,007,506	0	0
WLWT-DT BLCDT-19980625KG	Lic.	Cincinnati, OH	35	2,168,931	0	0
WLWT-DT BMPCDT-20041102AHZ	CP	Cincinnati, OH	35	2,985,990	0	0
WTVQ-TV BLCT-19800619IX	Lic.	Lexington, KY	36	691,390	2,849	0.41
WTWO-DT BMPCDT-20040312ADU	CP	Terre Haute, IN	36	745,369	219	<0.1
WKOI-TV BLCT-19820517KJ	Lic.	Richmond, IN	43	2,749,174	13,090	0.48
WKEF(TV) BLCT-2584	Lic.	Dayton, OH	22	2,988,539	9,625	0.32

POWER DENSITY CALCULATION

PROPOSED W61DE
CHANNEL 36 – CINCINNATI, OHIO

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Cincinnati facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 123.9 kw, an effective antenna height of 91 meters above ground, and the vertical pattern of the Andrew antenna, maximum power density two meters above ground of 0.013 mw/cm^2 is calculated to occur 29 meters south of the base of the tower. Since this is only 3.4 percent of the 0.40 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 36 (602-608 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.