

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of WFAA-TV, INC., licensee of WFAA-DT, Channel 8 in Dallas, Texas, in support of its Application for Construction Permit to operate with a maximized post-transition DTV facility.

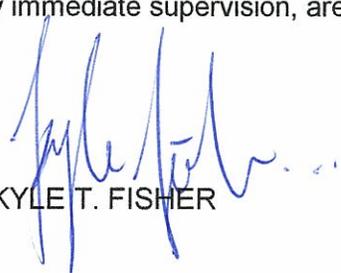
It is proposed to mount a standard ERI omnidirectional antenna at the 457-meter level of the existing 8-meter tower on which the present WFAA-DT antenna is mounted. Exhibit B provides an elevation pattern for the proposed antenna. Exhibit C is a map upon which the predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 43 dBu service contour. An interference study is included in Exhibit D, and it is important to note that the study utilized a cell size of 1.0 kilometers and an increment spacing of 0.1 kilometers. A power density calculation is provided in Exhibit E.

It is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station authorized to operate at or near the WFAA-DT site. However, if such should occur, the owner of this station recognizes its obligation to take whatever corrective actions are necessary.

Since no change in overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. In addition, the FCC issued Antenna Structure Registration Number 1011407 to this tower.

EXHIBIT A

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

June 10, 2008

Date

01 Feb 2008

Call Letters

WFAA-DT

Channel 8

Location

Dallas, TX

Customer

Antenna Type

TCL-12A8

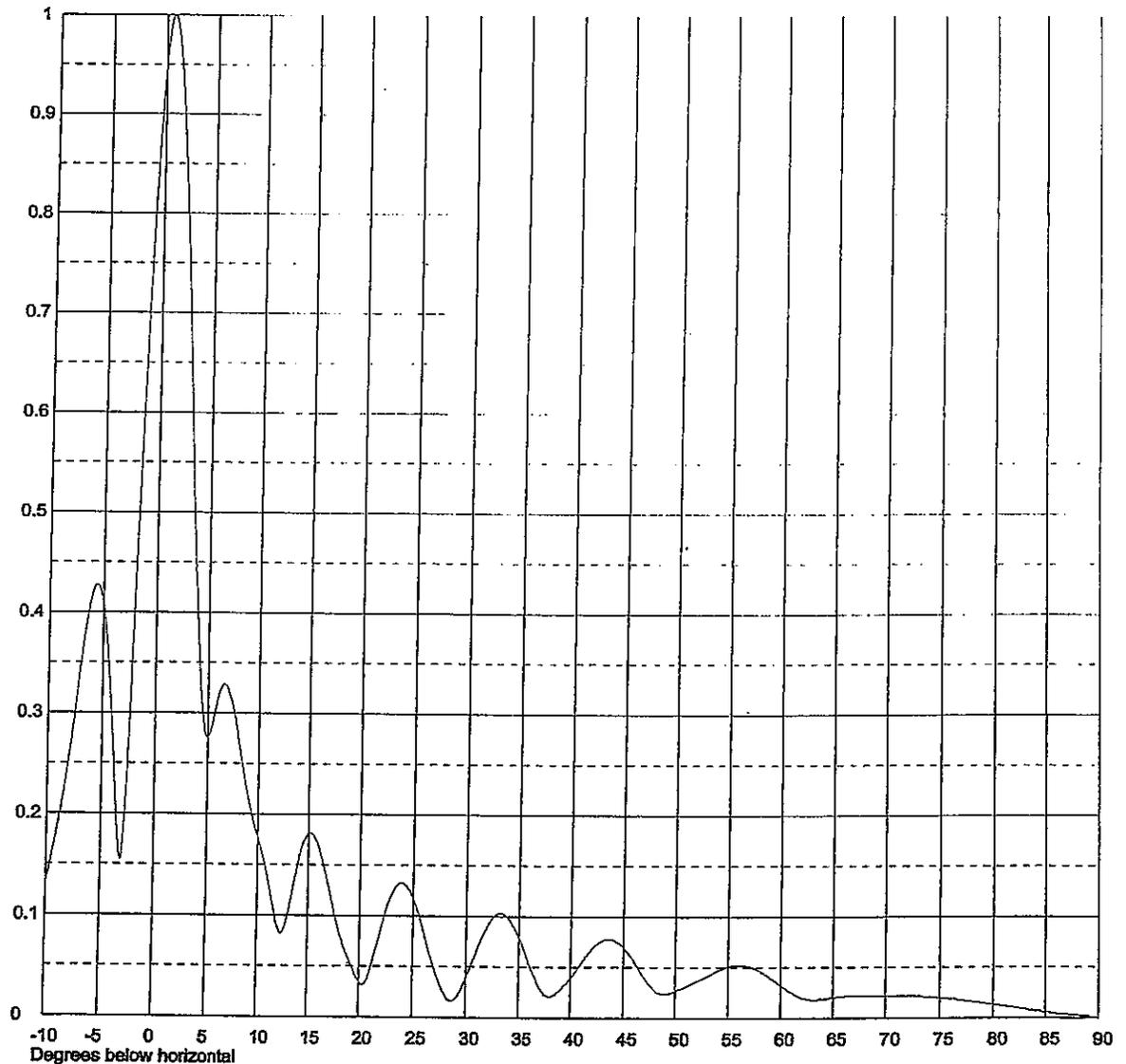
## ELEVATION PATTERN

RMS Gain at Main Lobe  
RMS Gain at Horizontal  
Calculated / Measured

4.7 (6.72 dB)  
4.2 (6.23 dB)  
Calculated

Beam Tilt  
Frequency  
Drawing #

0.75 Degrees  
183.00 MHz  
02T047075-90



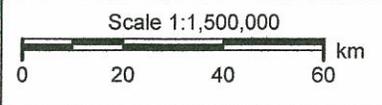
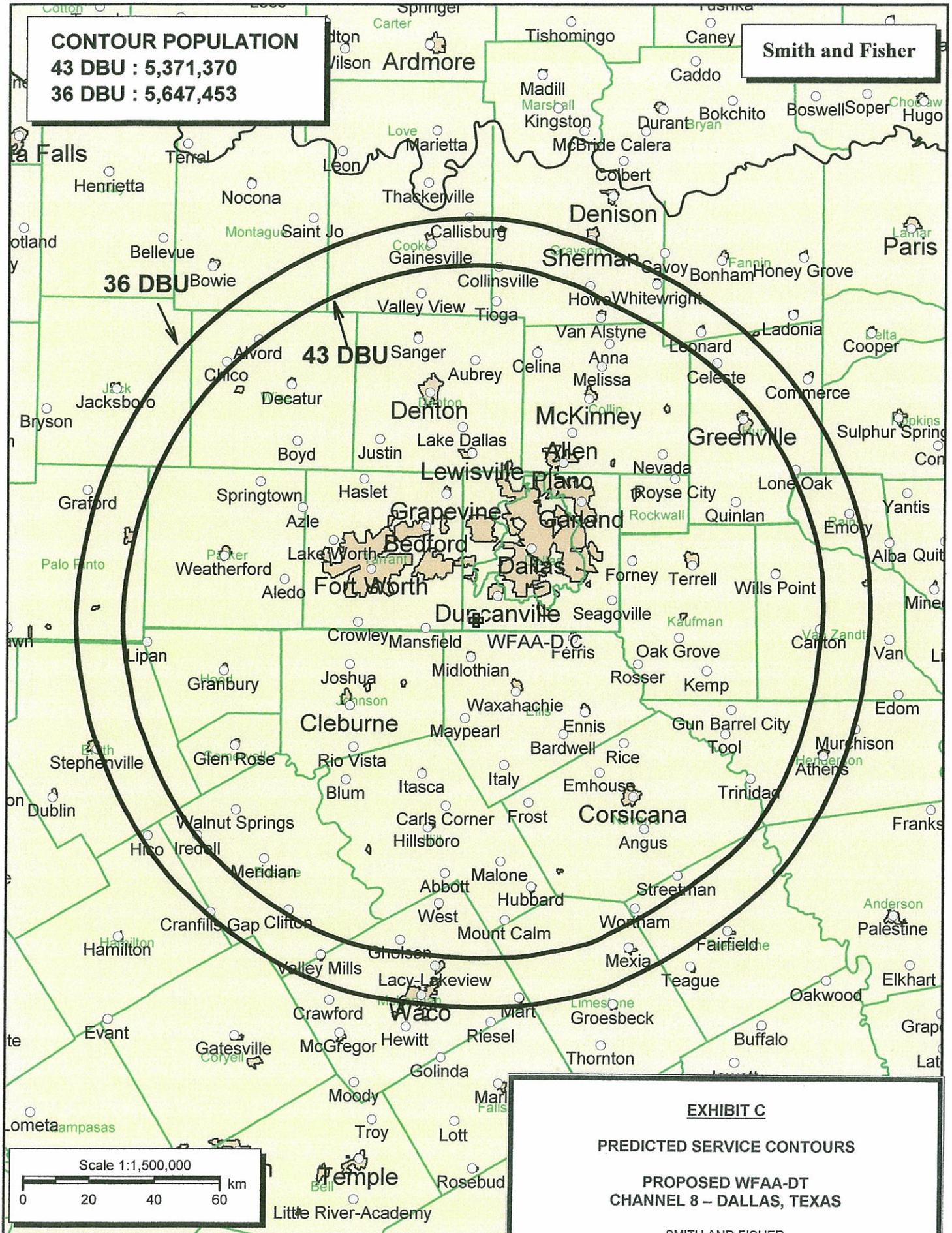
Remarks:

**EXHIBIT B****ANTENNA ELEVATION PATTERN****PROPOSED WFAA-DT  
CHANNEL 8 - DALLAS, TEXAS**

SMITH AND FISHER

**CONTOUR POPULATION**  
**43 DBU : 5,371,370**  
**36 DBU : 5,647,453**

**Smith and Fisher**



**EXHIBIT C**  
**PREDICTED SERVICE CONTOURS**  
**PROPOSED WFAA-DT**  
**CHANNEL 8 - DALLAS, TEXAS**  
**SMITH AND FISHER**

INTERFERENCE STUDY  
PROPOSED WFAA-DT  
CHANNEL 8 – DALLAS, TEXAS

The instant application specifies an ERP of 45 kw (omnidirectional) at 512 meters above average terrain, which we have determined to be allowable under the FCC's recently approved interference standards with respect to various post-transition digital television facilities as they will exist on or before February 17, 2009, the date by which all stations must operate with the parameters recently adopted in the Commission's DTV Table of Allotments.

In evaluating the interference effect of this proposal, we have relied upon the V-Soft Communications "Probe III" computer program, which has been found generally to mimic the FCC's program. In conducting our studies, we employed a cell size of 1.0 kilometers and an increment spacing of 0.1 kilometer along each radial. In addition, we utilized the 2000 U.S. Census. Changes in interference caused by proposed WFAA-DT to other pertinent stations are tabulated in Exhibit D-2.

As shown, the proposed WFAA-DT facility would not contribute more than 0.5% interference (beyond that which is caused by the allotted WATC-DT facility) to the service population of any potentially affected post-transition DTV station.

A Longley-Rice interference study also reveals that the proposed WFAA-DT facility does not cause significant (0.5%) interference within the protected service contour of any potentially affected Class A low power television station.

Therefore, this proposal meets the FCC's *de minimis* interference standards for DTV operations.

## INTERFERENCE STUDY SUMMARY\*

PROPOSED WFAA-DT  
CHANNEL 8 – DALLAS, TEXAS

<u>Call Sign</u>	<u>Lic. Type</u>	<u>City, State</u>	<u>CH.</u>	<u>Coverage Population</u>	<u>Interference Population From WFAA-DT</u>	<u>%</u>
KLTV-DT BPCDT-20080505ABR	CP	Tyler, TX	7	762,710	3,316	0.4
KJRH-DT BPCDT-20080228ABB	CP	Tulsa, OK	8	1,287,938	60	<0.1
KLRN-DT BLEDT-20030430ABV	Lic.	San Antonio, TX	8	1,798,373	151	<0.1
KUHT-DT BPEDT-20080314ABU	CP	Houston, TX	8	4,832,026	5,236	0.1
KCEN-DT BLCDT-20021010AAB	Lic.	Temple, TX	9	1,362,424	0	0
KFWD-DT BPCDT-20080312ACF	CP	Fort Worth, TX	9	5,366,243	161	<0.1
KJRH-DT Allotment	Allot.	Tulsa, OK	8	1,288,967	176	<0.1
KLTV-DT Allotment	Allot.	Tyler, TX	7	765,240	3,301	0.4
KUHT-DT Allotment	Allot.	Houston, TX	8	4,830,864	3,654	0.1
KFWD-DT Allotment	Allot.	Fort Worth, TX	9	5,304,803	2,540	<0.1
KCEN-DT Allotment	Allot.	Temple, TX		1,362,424	0	0

\*This study utilized a cell size of 1.0 km and an increment spacing of 0.1 km.

POWER DENSITY CALCULATION

PROPOSED WFAA-DT  
CHANNEL 8 – DALLAS, TEXAS

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Dallas facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 45 kw (H, V), an antenna radiation center 481 meters above ground, and the elevation pattern of the Dielectric antenna, maximum power density two meters above ground of  $0.000042 \text{ mw/cm}^2$  is calculated to occur 738 meters from the base of the tower. Since this is less than 0.1 percent of the  $0.2 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 8 (180-186 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level 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.