

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRINITY BROADCASTING NETWORK, licensee of WPGD-DT, Channel 51 in Hendersonville, Tennessee, in support of this Application for Construction Permit to correct site coordinates, ground elevation, overall tower height, as well as antenna height above mean sea level and above average terrain. This application results from the tower owner's submission of a revised FCC Antenna Structure Registration record for the tower on which the WPGD-DT antenna is mounted.

Exhibit B provides directional antenna pattern data, and operating parameters for the licensed facility are tabulated in Exhibit C. Exhibit D is a map upon which the revised predicted service contours are plotted. As shown, the city of license is completely contained within the proposed 48 dBu service contour. Since the revised 41 dBu contour is completely contained within that licensed to WPGD-DT, this application meets the terms of the current Commission freeze on the filing of DTV modification applications. For the same reason, no interference study is being provided. A power density calculation appears in Exhibit E.

Since no change in the overall height or location of the existing tower is proposed herein, the FAA has not been notified of this application. The FCC issued revised Antenna Structure Registration Number 1233975 to this tower.

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

KEVIN T. FISHER

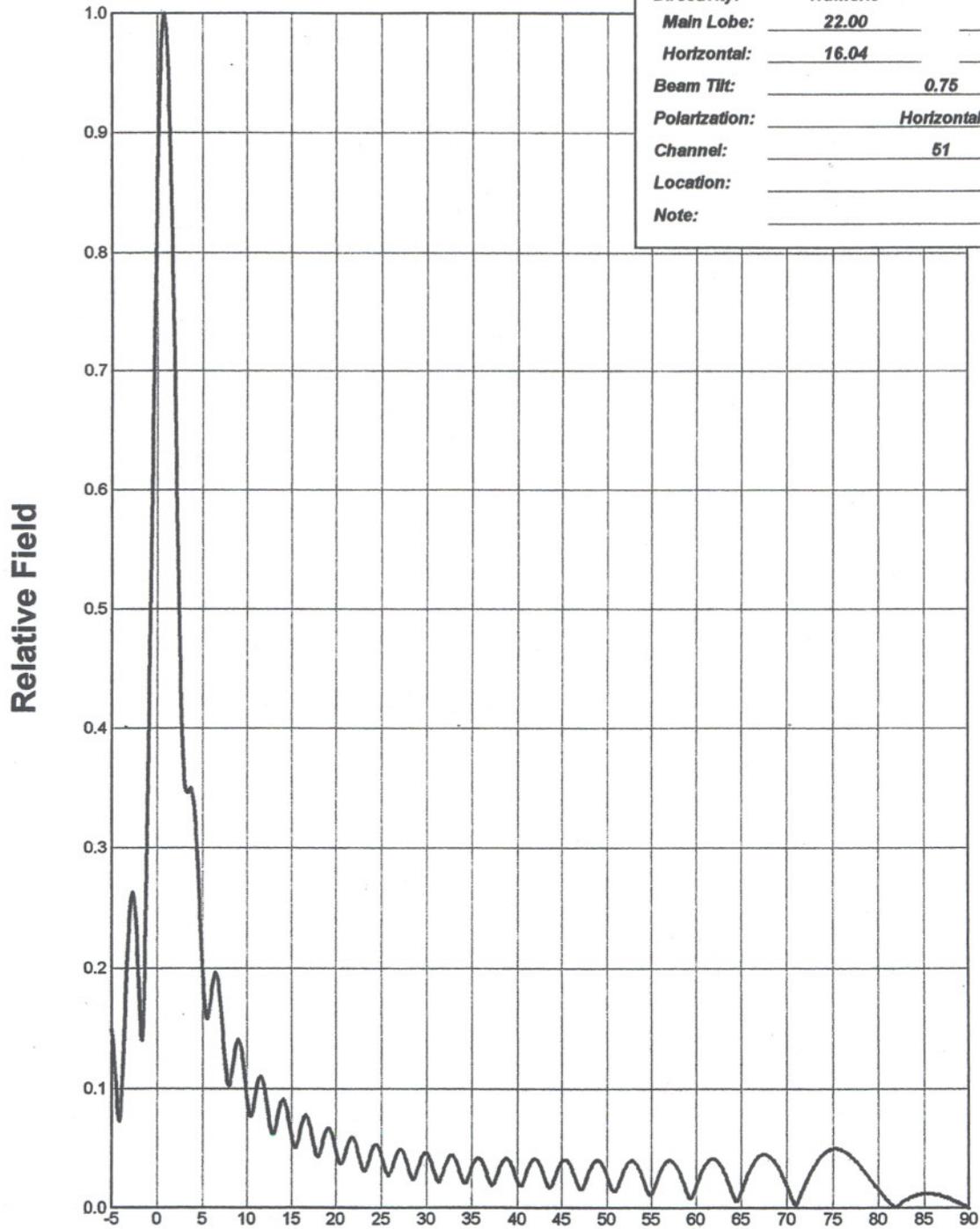
February 25, 2008



ANDREW.

ELEVATION PATTERN

| | | |
|---------------|------------|-------|
| Type: | ATL22H3H | |
| Directivity: | Numeric | dBd |
| Main Lobe: | 22.00 | 13.42 |
| Horizontal: | 16.04 | 12.05 |
| Beam Tilt: | 0.75 | |
| Polarization: | Horizontal | |
| Channel: | 51 | |
| Location: | | |
| Note: | | |



ANDREW CORPORATION
 10500 W. 153rd Street
 Orland Park, Illinois U.S.A 60462

EXHIBIT B-1

ANTENNA ELEVATION PATTERN

**PROPOSED WPGD-DT
 CHANNEL 51 - HENDERSONVILLE, TENNESSEE**

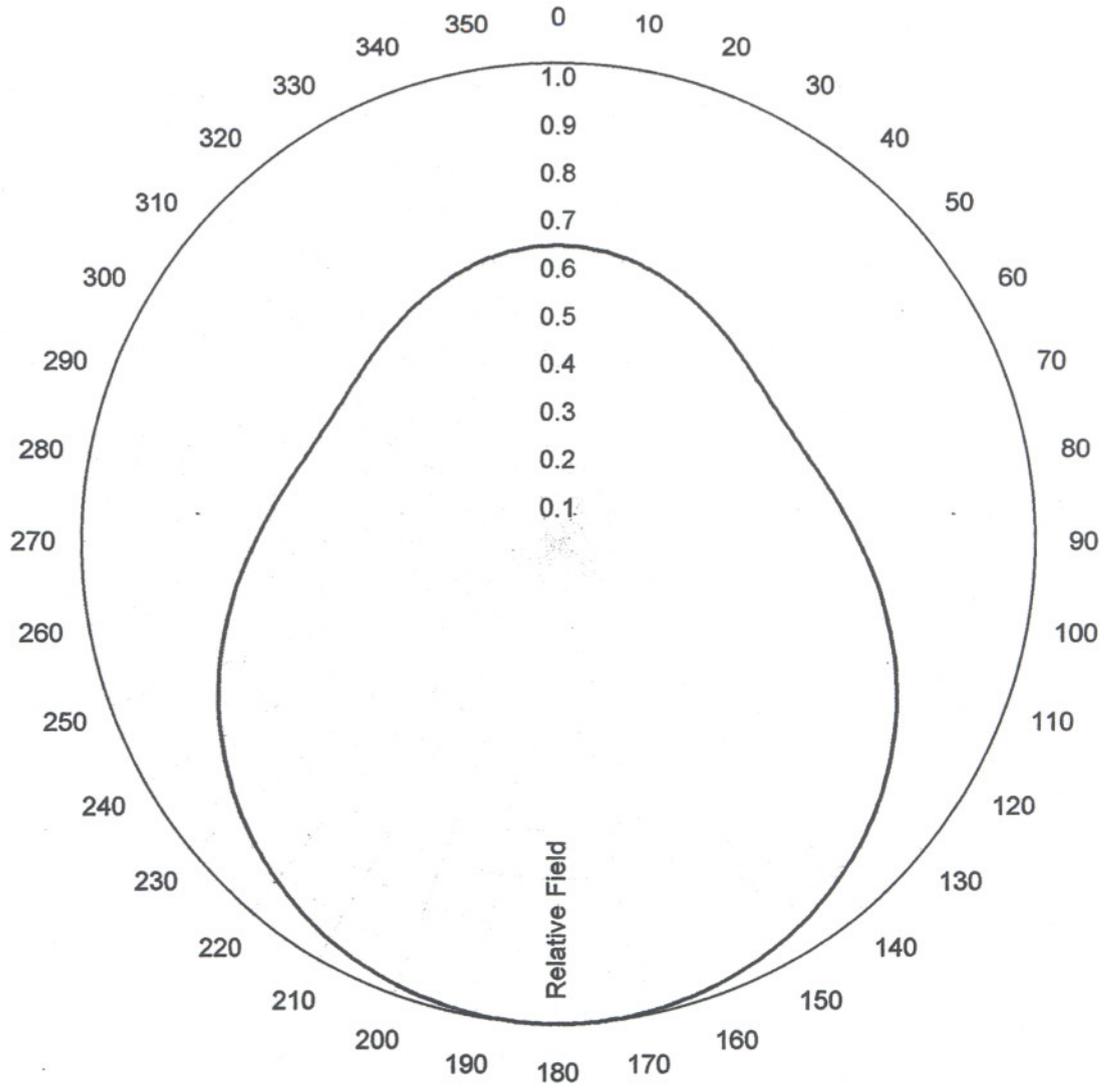
SMITH AND FISHER



AZIMUTH PATTERN

Type: ATL-S

| | Numeric | dBd |
|---------------|-------------------|-------------|
| Directivity: | <u>1.83</u> | <u>2.62</u> |
| Peak(s) at: | | |
| Polarization: | <u>Horizontal</u> | |
| Channel: | <u>51</u> | |
| Location: | | |
| Note: | | |



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EXHIBIT B-2

ANTENNA AZIMUTH PATTERN

PROPOSED WPGD-DT
CHANNEL 51 - HENDERSONVILLE, TENNESSEE

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PROPOSED OPERATING PARAMETERS

PROPOSED WPGD-DT
CHANNEL 51 – HENDERSONVILLE, TENNESSEE

| | |
|--|-----------------------|
| Transmitter Power Output: | 10.0 kw |
| Transmission Line Efficiency: | 65.5% |
| Antenna Power Gain – Toward Horizon: | 29.37 |
| Antenna Power Gain – Main Lobe: | 40.26 |
| Effective Radiated Power – Toward Horizon: | 192 kw |
| Effective Radiated Power – Main Lobe: | 264 kw |
| Transmitter Make and Model: | Type-accepted |
| Rated Output | 10.0 kw |
| Transmission Line Make and Model: | Andrew MACX650 |
| Size and Type: | 6-1/8" rigid |
| Length: | 1,400 feet |
| Antenna Make and Model: | Andrew ATL22H3-HSS-51 |
| Orientation | 180 degrees true |
| Beam Tilt | 0.75 degrees |
| Radiation Center Above Ground: | 364 meters |
| Radiation Center Above Mean Sea Level: | 596 meters |

CONTOUR POPULATION
48 DBU : 1,576,190
41 DBU : 1,751,122

SMITH and FISHER

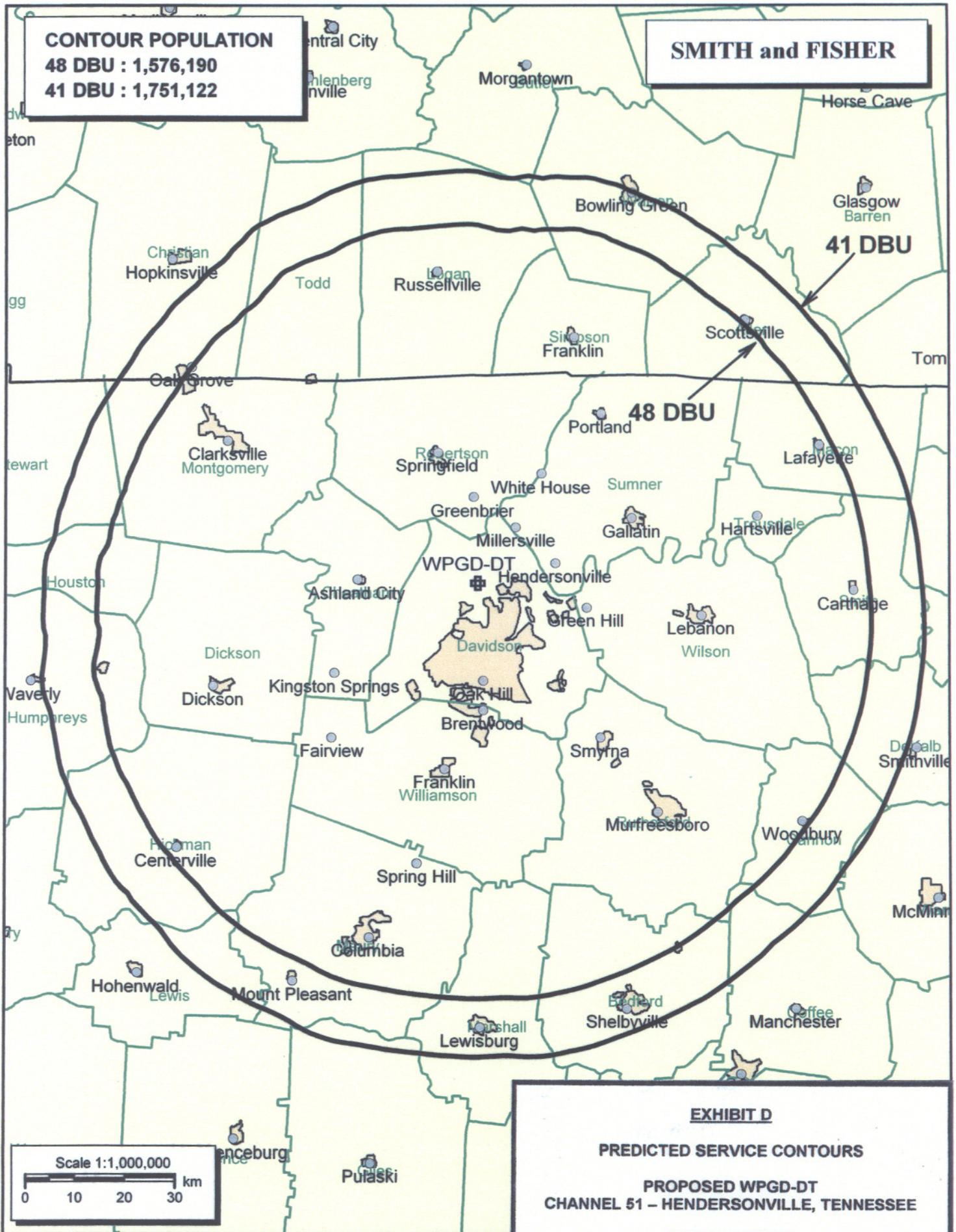


EXHIBIT D

PREDICTED SERVICE CONTOURS

**PROPOSED WPGD-DT
CHANNEL 51 – HENDERSONVILLE, TENNESSEE**

SMITH AND FISHER

EXHIBIT E

POWER DENSITY CALCULATION

PROPOSED WPGD-DT
CHANNEL 51 – HENDERSONVILLE, TENNESSEE

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Hendersonville facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 264 kw, an effective antenna height of 364 meters above ground, and the vertical pattern of the Andrew antenna, maximum power density two meters above ground of 0.00015 mw/cm^2 is calculated to occur 97 meters south of the base of the tower. Since this is less than 0.1 percent of the 0.46 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 51 (692-698 MHz), a grant of this proposal may be considered a minor environmental action 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.