

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of RADIANT LIFE MINISTRIES, INC., licensee of digital television station WRAY-DT, Channel 42 in Wilson, North Carolina, in support of its Request for Special Temporary Authority (STA) to operate a temporary facility at the site of WRAY-DT, during such time as it takes to repair the transmitter and achieve the authorized effective radiated power of 873 kW. This STA facility proposes operation with an effective radiated power of 175 kW. No change in site location, antenna make or model or antenna height from that authorized in BLCDT-20060609AAX is proposed herein.

It is proposed to operate with the Dielectric antenna that is currently mounted at the 530-meter level of an existing 600-meter tower. Exhibit B is a map upon which the predicted service contours of the STA facility are plotted. As shown, the city of license (Wilson) is completely contained within the proposed STA facility's 48 dBu contour. And, since the purpose of this STA is to operate with the same facility as that authorized to WRAY-DT in BLCDT-20060609AAX, but at somewhat lower power, the STA facility's predicted service contour is completely contained within that of the authorized facility, as shown in Exhibit C. As a result, and since this proposal is for a temporary facility, no interference study is provided herein. A power density calculation appears in Exhibit D.

It is not expected that the proposed facility would cause objectionable interference to any other broadcast or non-broadcast station operating at or near the WRAY-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 1004438 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.

A handwritten signature in blue ink, appearing to read "K. T. Fisher". The signature is stylized with a large "K" and "F" and a smaller "T" in the middle.

KEVIN T. FISHER

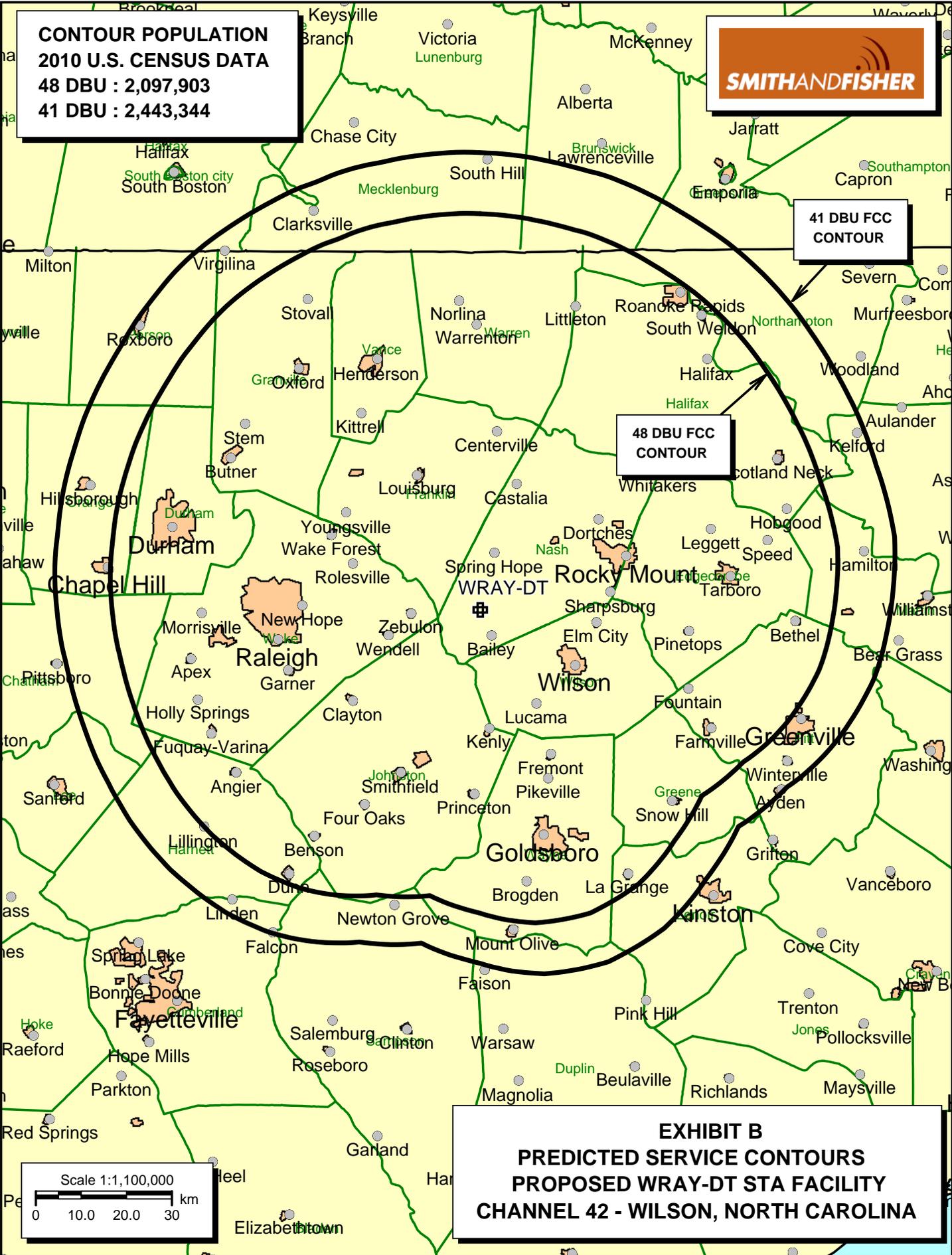
March 4, 2013



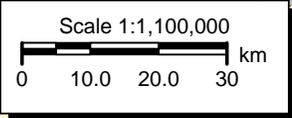
**CONTOUR POPULATION**  
**2010 U.S. CENSUS DATA**  
**48 DBU : 2,097,903**  
**41 DBU : 2,443,344**

**41 DBU FCC CONTOUR**

**48 DBU FCC CONTOUR**



**EXHIBIT B**  
**PREDICTED SERVICE CONTOURS**  
**PROPOSED WRAY-DT STA FACILITY**  
**CHANNEL 42 - WILSON, NORTH CAROLINA**





LICENSED 41 DBU  
CONTOUR

PROPOSED STA  
41 DBU CONTOUR



**EXHIBIT C**  
**CONTOUR COMPARISON**  
**PROPOSED WRAY-DT STA FACILITY**  
**CHANNEL 42 - WILSON, NORTH CAROLINA**

POWER DENSITY CALCULATION

PROPOSED WRAY-DT STA  
CHANNEL 42 – WILSON, NORTH CAROLINA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Wilson facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 175 kW, an antenna radiation center 530 meters above ground, and the specific elevation pattern of the Dielectric antenna, maximum power density two meters above ground of 0.000011 mW/cm<sup>2</sup> is calculated to occur 1376 meters north-northwest of the base of the tower. Since this is less than 0.1 percent of the 0.43 mW/cm<sup>2</sup> reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 42 (638-644 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.