

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of TRINITY BROADCASTING NETWORK, licensee of television translator K53DT, Channel 53 in Monterey, California, in support of this Application for Construction Permit to specify operation on Channel 27 from the licensed K53DT site. This proposal is being submitted in response to the Commission's reclamation of Channel 53 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 66-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 K53DT 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 1049885 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

July 8, 2003

**CONTOUR POPULATION**  
**GRADE A (74 DBU) : 308,301**  
**GRADE B (64 DBU) : 405,606**

**Smith and Fisher**

GRADE B

GRADE A

**EXHIBIT B**

Scale 1:500,000

0 7 14 21 km

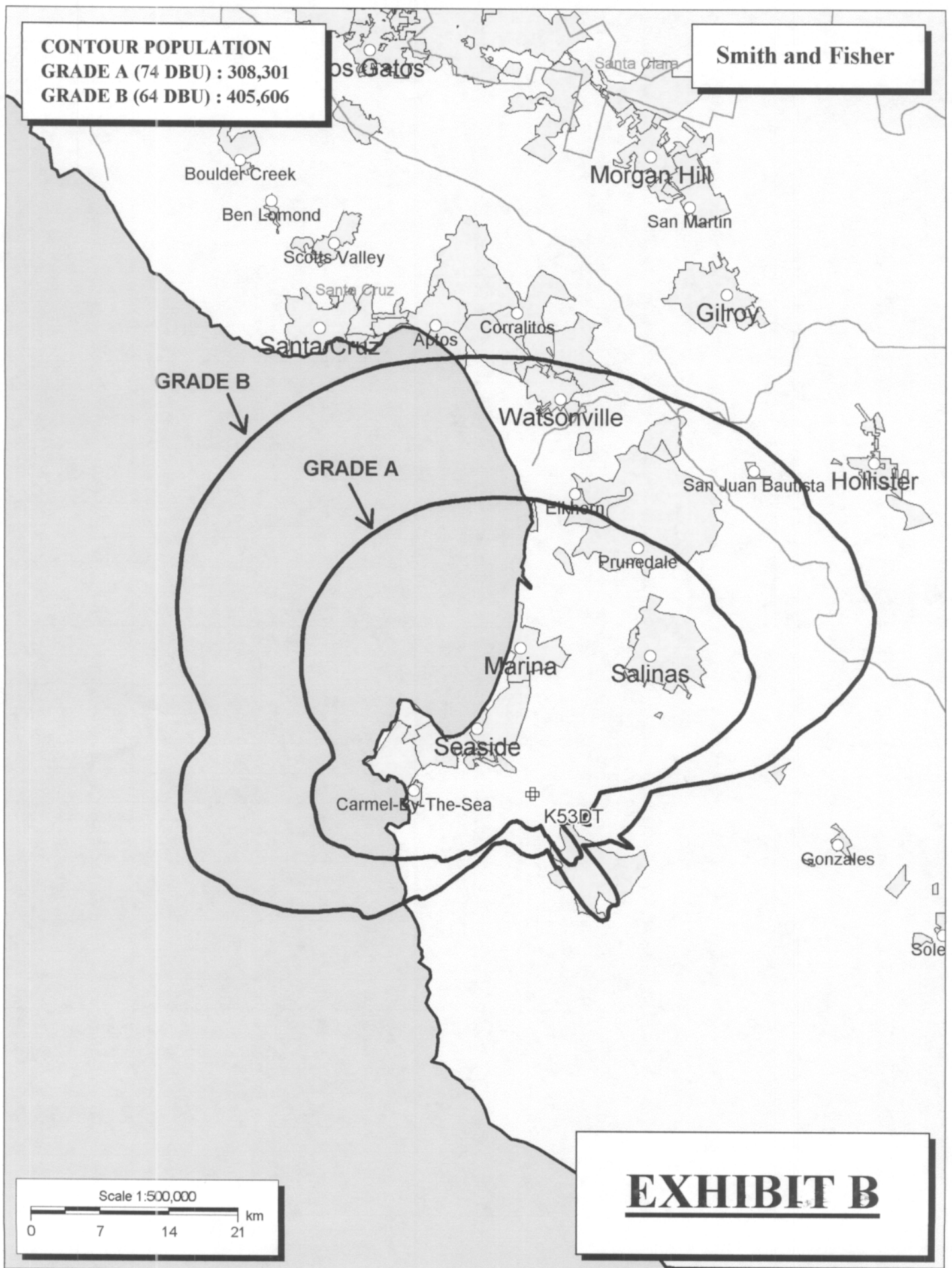


EXHIBIT C

## PROPOSED OPERATING PARAMETERS

PROPOSED K53DT  
CHANNEL 27 – MONTEREY, CALIFORNIA

Transmitter Power Output:	1.0 kw
Transmission Line Efficiency:	86.5%
Antenna Power Gain – Toward Horizon:	25.52
Antenna Power Gain – Main Lobe:	25.52
Effective Radiated Power – Toward Horizon:	22.1 kw
Effective Radiated Power – Main Lobe:	22.1 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" dielectric
Length:	125 feet
Antenna Make and Model:	Andrew ALP8L1-HSMR
Orientation	0 degrees true
Beam Tilt	0.5 degrees
Effective Height Above Ground:	30 meters
Effective Height Above Mean Sea Level:	393 meters

## POWER DENSITY CALCULATION

PROPOSED K53DT  
CHANNEL 27 – MONTEREY, CALIFORNIA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Monterey facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 22.1 kw, an effective antenna height of 30 meters above ground, and the vertical pattern of the Andrew antenna, maximum power density two meters above ground of  $0.028 \text{ mw/cm}^2$  is calculated to occur 11 meters north of the base of the tower. Since this is only 7.6 percent of the  $0.37 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 27 (548-554 MHz), 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.