EXHIBIT A

ENGINEERING STATEMENT

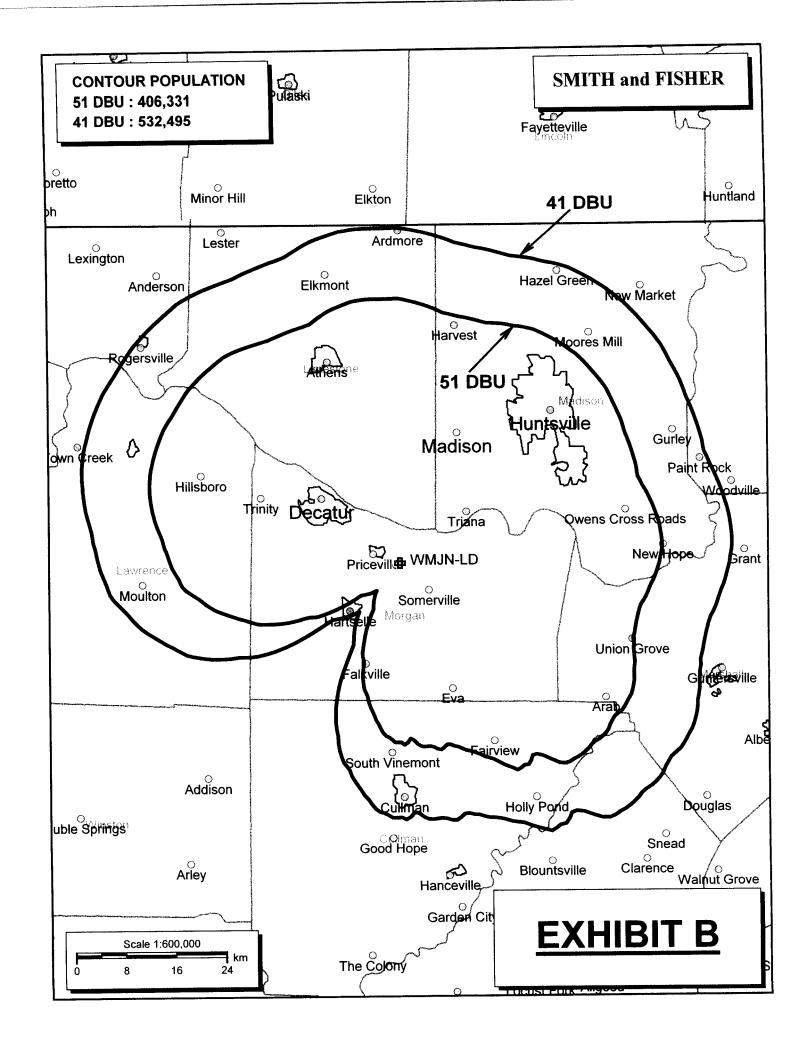
The engineering data contained herein have been prepared on behalf of FIRST BAPTIST CHURCH OF CULLMAN, ALABAMA, INC., licensee of Low Power Television Station WMJN-LP, Channel 29 in Somerville, Alabama, in support of this Application for Construction Permit to specify digital operation on Channel 29 from the licensed WMJN-LP site, as a "flashcut" proposal.

It is proposed to mount a standard MCI directional antenna at the 58-meter level of the existing 60-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 51 dBu contour encompasses a significant portion of the Grade A contour that obtains from the licensed WMJN-LP facility. Operating parameters for the proposed facility are tabulated in Exhibit C. An interference study is 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. Due to the diminutive height of the tower and its proximity to the nearest airport runway, FCC antenna structure registration is not required. This conclusion is supported by the Commission's TOWAIR Program.

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



SMITH AND FISHER

EXHIBIT C

PROPOSED OPERATING PARAMETERS

PROPOSED WMJN-LD CHANNEL 29 – SOMERVILLE, ALABAMA

Transmitter Power Output:	0.7 kw
Transmission Line Efficiency:	77.7%
Antenna Power Gain – Toward Horizon:	18.4
Antenna Power Gain – Main Lobe:	18.4
Effective Radiated Power – Toward Horizon:	10.0 kw
Effective Radiated Power – Main Lobe:	10.0 kw

Transmitter Make and Model: Type-accepted
Rated Output 1.0 kw

Transmission Line Make and Model:

Size and Type:

Length:

Andrew HJ7-50A

1-5/8" air heliax

215 feet*

Antenna Make and Model:

Orientation

Beam Tilt

Radiation Center Above Ground:

Radiation Center Above Mean Sea Level:

MCI 955214

40° T

0.5 degrees

58 meters

^{*}estimated

EXHIBIT D-1

PROPOSED WMJN-LD CHANNEL 29 – SOMERVILLE, ALABAMA

We conducted detailed interference studies using the Longley-Rice methodology contained in the Commission's *OET Bulletin No.* 69, with respect to all facilities of concern. The software utilizes a 1-square kilometer cell size, calculates signal strength at 0.1 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 proposed WMJN-LD) already is predicted to exist (also known as "masking"). The results of these studies are provided in Exhibit D-2. They conclude that the facility proposed herein causes no significant new interference to any of the potentially affected stations.

As a result, it is believed that the proposed WMJN-LD facility complies with the requirements of Sections 74.709, 74,793(e), 74.793(f), 74.793(g), 74.793(h), 74.794(b) and 73.1030 of the Commission's Rules.

SMITH AND FISHER

EXHIBIT D-2

INTERFERENCE SUMMARY

PROPOSED WMJN-LP CHANNEL 29 – SOMERVILLE, ALABAMA

Call Sign	Status	City, State	<u>Ch.</u>	Longley-Rice Service Population	Unmasked Interference From Proposed Facility	<u>%</u>
WIAT-DT BLCDT-2002	Lic. 1219AA\	Birmingham, AL /	30	1,537,834	2,988	0.2
NEW-DT BSFDTL-200	Appl. 60630D0	Lewisburg, TN CD	29	59,097	367	0.6
WTCI-DT BPEDT-2000	CP 0428AC	Chattanooga, TN Q	2 9	854,002	496	<0.1
WTTO-DT BMPCDT-200	CP 041104A	Homewood, AL MB	28	1,526,362	515	<0.1

EXHIBIT E

POWER DENSITY CALCULATION

PROPOSED WMJN-LP CHANNEL 29 – SOMERVILLE, ALABAMA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Somerville facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 10.0 kw, an antenna radiation center 58 meters above ground, and the vertical pattern of the MCI antenna, maximum power density two meters above ground of 0.00051 mw/cm² is calculated to occur 45 meters northeast of the base of the tower. Since this is only 0.1 percent of the 0.37 mw/cm² reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 29 (560-566 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.