

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of NTD PUBLIC MEDIA in support of its amendment to Application for Construction Permit [BNPL-20131114ATM] to operate a Low Power FM station on Channel 269 (101.7 MHz) in Houston, Texas from a new site.

It is proposed to mount a standard two-bay circularly polarized antenna at the 28-meter level of a proposed 30-meter pole. The proposed effective radiated power is 100 watts. Exhibit B is a map upon which the proposed 60 dBu service contour for the proposed facility is plotted. It is important to note that the proposed location meets all of the Commission's spacing requirements to pertinent co-channel and adjacent-channel full-power, FM translator and LPFM stations, except in one instance. The proposed site is short-spaced to second-adjacent-channel station KMJQ(FM) in Houston, Texas. As a result, we request a waiver of the Commission's Rules with respect to KMJQ(FM) and the justification appears in Exhibit C. We have also determined that the proposed facility should not cause objectionable interference to the input signal of any existing translator station, based on the information contained in the FCC's CDBS database.

Employing the methods of OET Bulletin No. 65, and based on the elevation pattern of a standard 2-bay FM antenna, maximum power density two meters above ground of  $0.0077 \text{ mW/cm}^2$  is calculated to occur 7 meters from the base of the tower. Since this is only 3.9 percent of the  $0.2 \text{ mW/cm}^2$  reference for uncontrolled environments (areas with public access)

EXHIBIT A

surrounding a facility operating in the FM band, a grant of this proposal can be considered a minor environmental action with respect to human exposure to non-ionizing electromagnetic radiation. Further the station owner will take whatever precautionary steps are necessary to ensure that workers operating in the vicinity of the antenna are not exposed to RF energy in excess of the Commission's guideline values.

Due to the diminutive height of the existing building and its proximity to the nearest airport runways, the FAA has not been notified of this application. In addition, FCC registration of this structure is not required for the same reasons. This conclusion is supported by the Commission's TOWAIR program.

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



KYLE T. FISHER

February 13, 2014

**CONTOUR POPULATION  
2010 U.S. CENSUS DATA  
247,288**



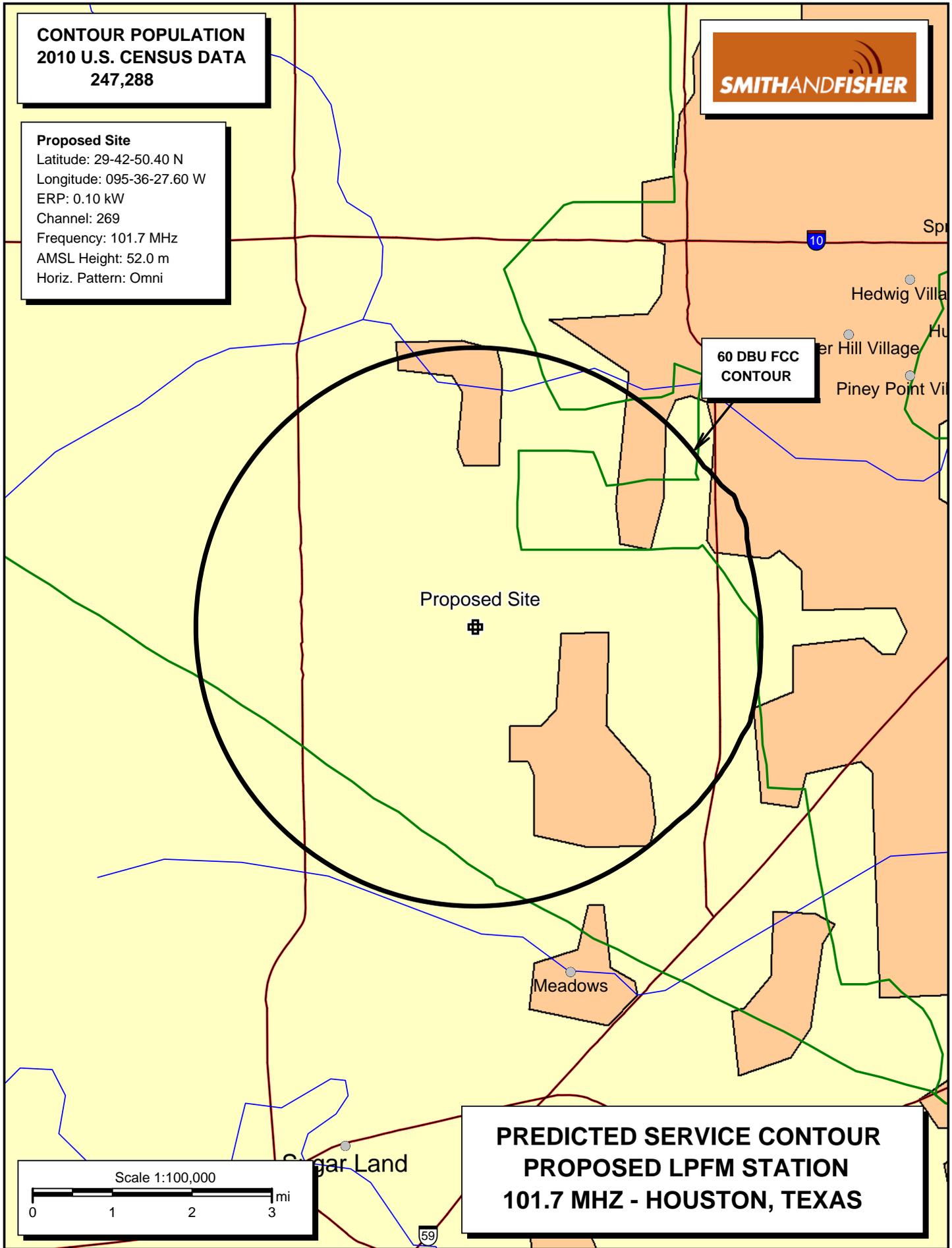
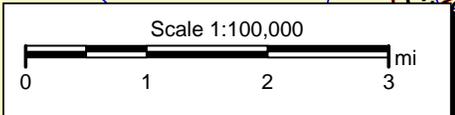
**Proposed Site**  
Latitude: 29-42-50.40 N  
Longitude: 095-36-27.60 W  
ERP: 0.10 kW  
Channel: 269  
Frequency: 101.7 MHz  
AMSL Height: 52.0 m  
Horiz. Pattern: Omni

**60 DBU FCC  
CONTOUR**

Proposed Site  
⊕

Meadows

**PREDICTED SERVICE CONTOUR  
PROPOSED LPFM STATION  
101.7 MHz - HOUSTON, TEXAS**



REQUEST FOR WAIVER OF SECOND-ADJACENT-CHANNEL SPACING RULE  
PROPOSED LPFM STATION  
CHANNEL 269 – HOUSTON, TEXAS  
[AMENDMENT TO BNPL-20131114ATM]

The site proposed herein is located 19.0 kilometers from that KMJQ, which operates on Channel 271C in Houston. Since the required spacing is 93 kilometers, a waiver of the Commission's spacing rules with regard to this station is requested and believed to be justified for the reasons stated below.

Attached, as Exhibit C-2, is a map on which the proposed LPFM site is plotted in relation to the KMJQ 93.9 dBu contour, which passes close to the LPFM site. With a 40 dB desired-to-undesired ratio for second-adjacent-channel stations applied in this instance, we have also plotted the proposed LPFM proposal's 133.9 dBu interference contour. This contour extends a maximum of 10 meters from the proposed LPFM antenna. Since the LPFM antenna will be mounted 28 meters above ground level, the proposed interference contour will exist 18 meters above ground and will therefore have no adverse effect on reception of KMJQ.

Accordingly, a waiver of the Commission's Rules with regard to KMJQ is requested and believed to be justified.

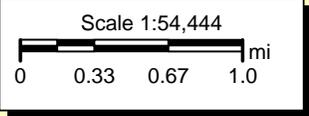


**NOTE: PROPOSED LPFM INTERFERENCE CONTOUR EXTENDS 10 METERS FROM ANTENNA. SINCE ANTENNA WILL BE MOUNTED 28 METERS ABOVE GROUND, INTERFERENCE CONTOUR CONTAINS NO POPULATION AND LPFM STATION WILL NOT ADVERSELY AFFECT RECEPTION OF KMJQ.**

**KMJQ 93.9 DBU  
FCC CONTOUR**

**PROPOSED 133.9 DBU  
FCC CONTOUR  
(10 METERS)**

Proposed Site



**EXHIBIT C-2  
WAIVER MAP FOR KMJQ  
PROPOSED LPFM STATION  
101.7 MHZ - HOUSTON, TEXAS**