

TECHNICAL EXHIBIT  
APPLICATION FOR CONSTRUCTION PERMIT  
STATION WLBT-DT (FACILITY ID 68542)  
JACKSON, MISSISSIPPI

OCTOBER 21, 2009

CH 30 535 KW 624 M

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Table of Contents

Technical Narrative

Figure 1      Antenna and Supporting Structure

Figure 2      Predicted FCC Coverage Contours

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Technical Narrative

This Technical Exhibit supports an application for digital television (DTV) station WLBT-DT to cover its recently granted rulemaking proposal (see Report and Order in MB Docket No. 09-156).

Proposed Facilities

Station WLBT-DT proposes to operate DTV channel 30 with a non-directional antenna effective radiated power (ERP) of 535 kilowatts and antenna height above average terrain (HAAT) of 624 meters. These are the identical facilities to the recently granted rulemaking. Thus, no allocation studies are included. The transmitter site coordinates are:

32° 12' 49" North Latitude  
90° 22' 56" West Longitude


A sketch of antenna and pertinent elevations are included as Figure 1. Figure 2 is a map showing the DTV predicted coverage contours. The predicted 48 dBu contour will encompass all of Jackson. The Jackson city limits were derived from information contained in the 2000 U.S. Census of Population and Housing.

Radiofrequency Electromagnetic Field Exposure

The proposed WLBT-DT facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna is located 591 meters above ground level with an ERP of 535 kW. A conservative relative field value of 0.2 was assumed for the calculation. The calculated power density at a point 2 meters above ground level will not exceed  $0.002 \text{ mW/cm}^2$ . This is less than 5% of the FCC's recommended limit of  $0.38 \text{ mW/cm}^2$  for channel 30 for an "uncontrolled" environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the station is at reduced power or shut down. The proposed WLBT-DT operation appears to be otherwise categorically excluded from environmental processing.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner.



Jonathan N. Edwards

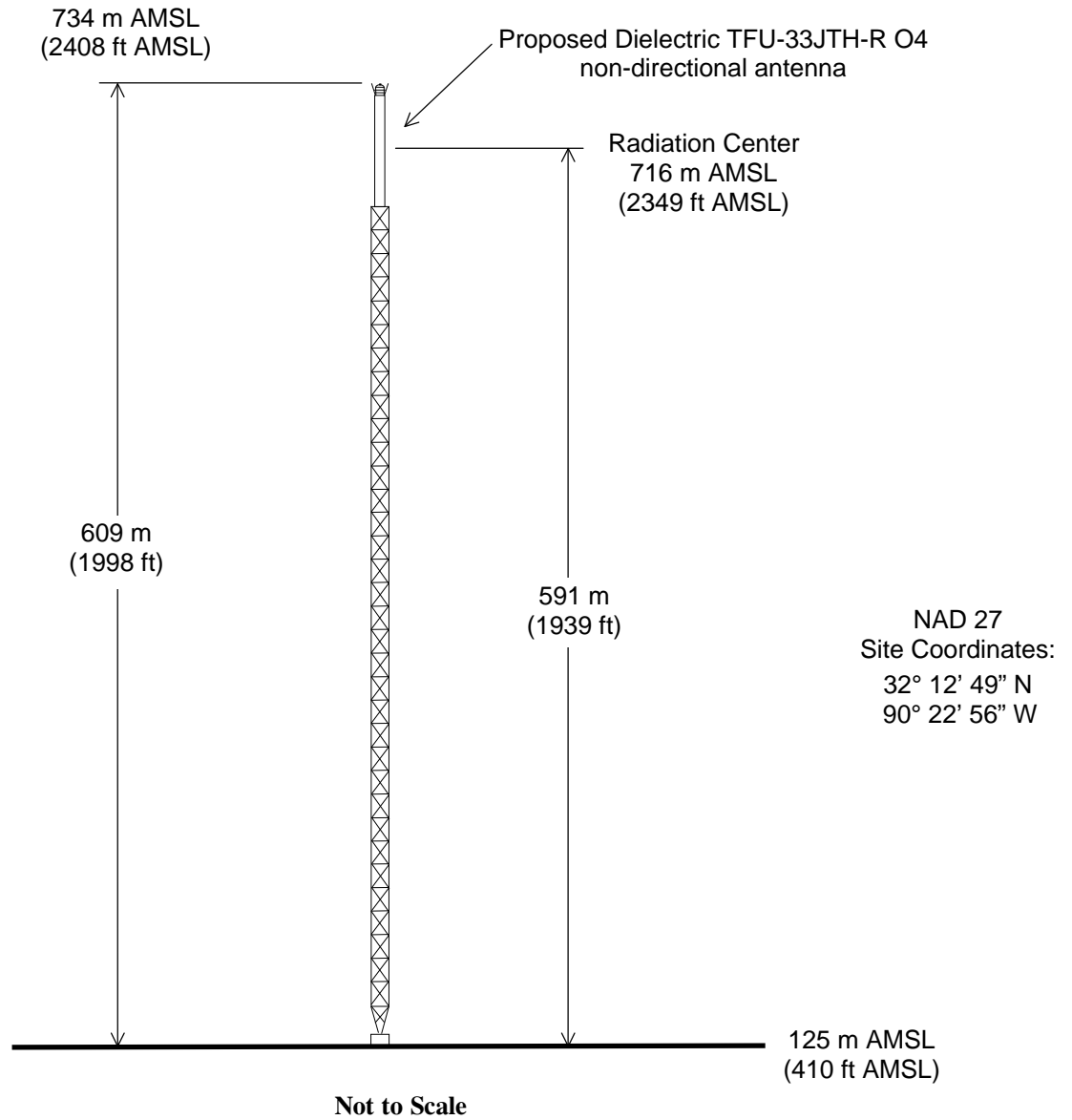
du Treil, Lundin & Rackley, Inc.  
201 Fletcher Avenue  
Sarasota, Florida 34237  
(941) 329-6000  
JON@DLR.COM

October 21, 2009

Figure 1



Registration No. 1210491

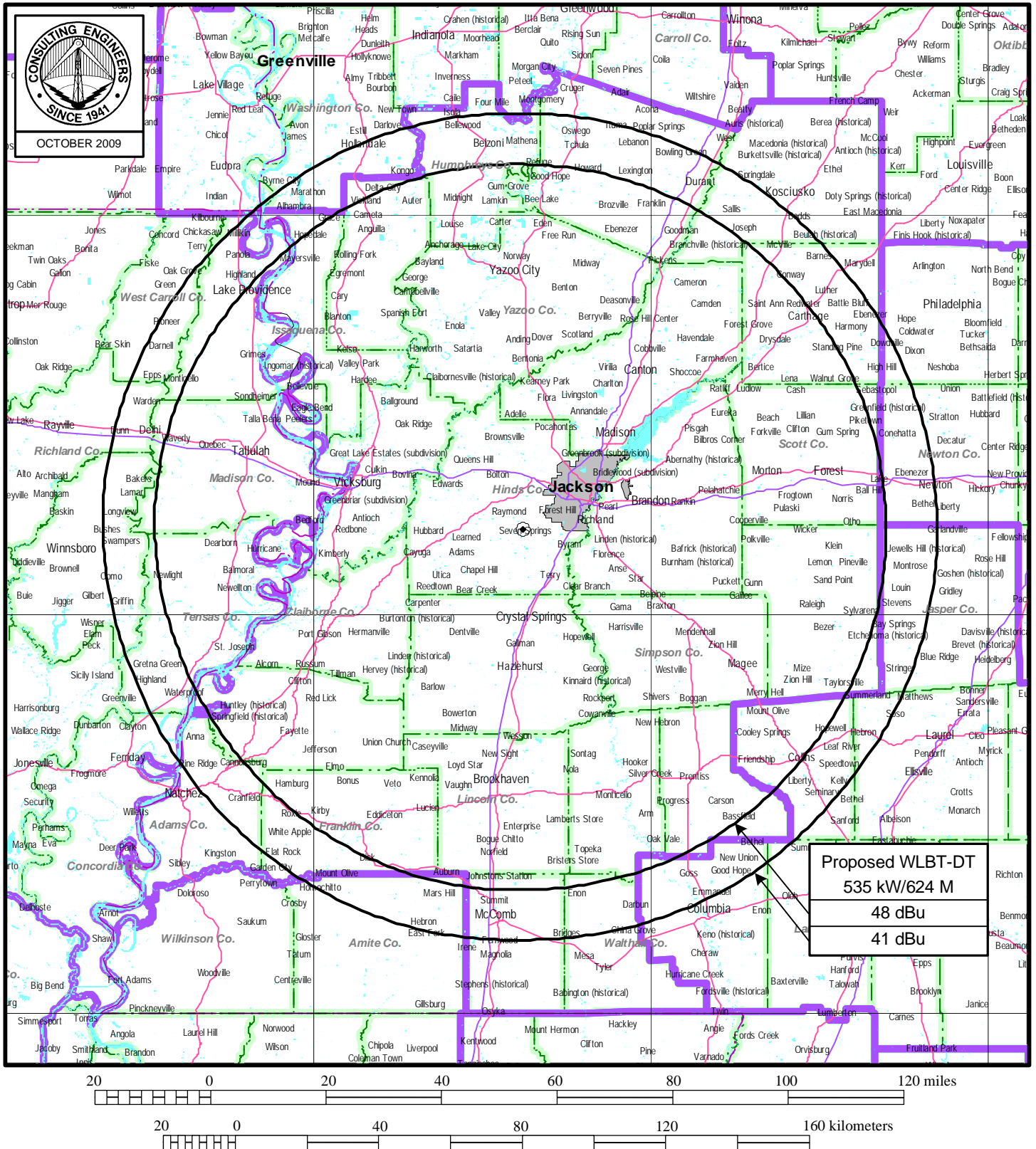


## ANTENNA AND SUPPORTING STRUCTURE

STATION WLBT-DT  
JACKSON, MISSISSIPPI  
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du Treil, Lundin & Rackley, Inc. Sarasota, Florida

**Figure 2**



## **PREDICTED COVERAGE CONTOURS**

**STATION WLBT-DT**

**JACKSON, MISSISSIPPI**

**CH 30 535 kW 624 M**

du Treil, Lundin & Rackley, Inc Sarasota, Florida