

**Exhibit 24.1**  
**USGS Topographic**  
**Map of Existing Site**

**Existing Site**  
**35°36'04" NL**  
**82°39'07" WL**  
**(NAD 1927)**

  
**MUNN-REESE, INC.**  
Broadcast Engineering Consultants  
Coldwater, MI 49036  
1(517)278-7339



35°36'29"N  
82°39'48"W    Map Extent    82°38'24"W  
35°35'39"N



Geographic Coordinate System (WGS84)



## Exhibit 24.2

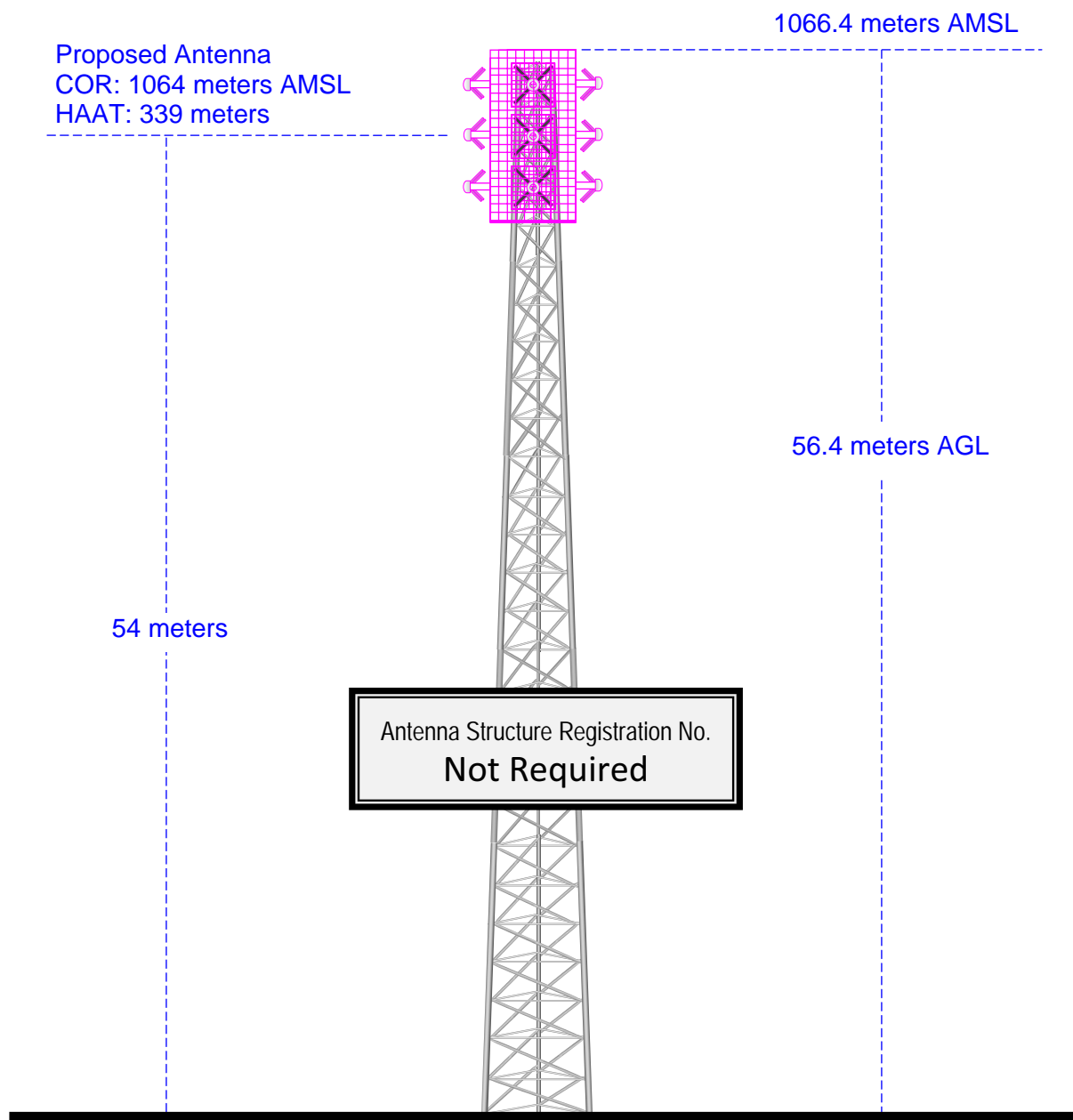
### Vertical Plan of Antenna System

The site is located on top of Spivey Mountain  
at the end of Spivey Mountain Road  
the city of Asheville, Buncombe County, North Carolina.

#### Site Location (NAD 27)

NL: 35° 36' 04"

WL: 82° 39' 07"



Ground Elevation = 1010.0 m AMSL  
Drawing is not to Scale

**MUNN-REESE, INC.**  
Broadcast Engineering Consultants  
Coldwater, MI 49036

## EXHIBIT 24.3

### PROPOSED FM OPERATING SPECIFICATIONS

---

**Applicant:** Saga Communications of North Carolina, LLC.

**Call:** WOXL-FM

**City of License:** Biltmore Forest, NC

**Frequency:** 96.5 MHz    **Channel:** 243C3    **ERP:** 2.1 kW    **HAAT:** 339 M

**Transmitter Location:** The site is located on top of Spivey Mountain at the end of Spivey Mountain Road.

**City:** Asheville

**County:** Buncombe

**State:** North Carolina

**Site Coordinates:** NL: 35° 36' 04"    /    WL: 82° 39' 07"

**Tower Registration Number:** 1033392

**Proposed Operation:** Class C3

**Effective Radiated Power:** 2.1 kW (H)                      2.1 kW (V)

**Height of Antenna Radiation Center Above:**

	<u>Average Terrain</u>	<u>Mean Sea Level</u>	<u>Ground</u>
Horizontal	339 meters	1064 meters	54 meters
Vertical	339 meters	1064 meters	54 Meters

**Elevation of Tower Site :** 1010.0 Meters AMSL

**Overall Height of Structure Above Ground :** 56.4 Meters AGL

**Overall Height of Structure Above Mean Sea Level:** 1066.4 Meters AMSL

# Exhibit 24.4 Present & Proposed Service Contour Study

**WOXL-FM.P**  
Proposed Operation  
Latitude: 35-36-04 N  
Longitude: 082-39-07 W  
ERP: 2.10 kW  
HAAT: 339 m  
Channel: 243  
Frequency: 96.5 MHz  
AMSL Height: 1064.0 m  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model: None

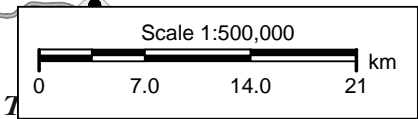
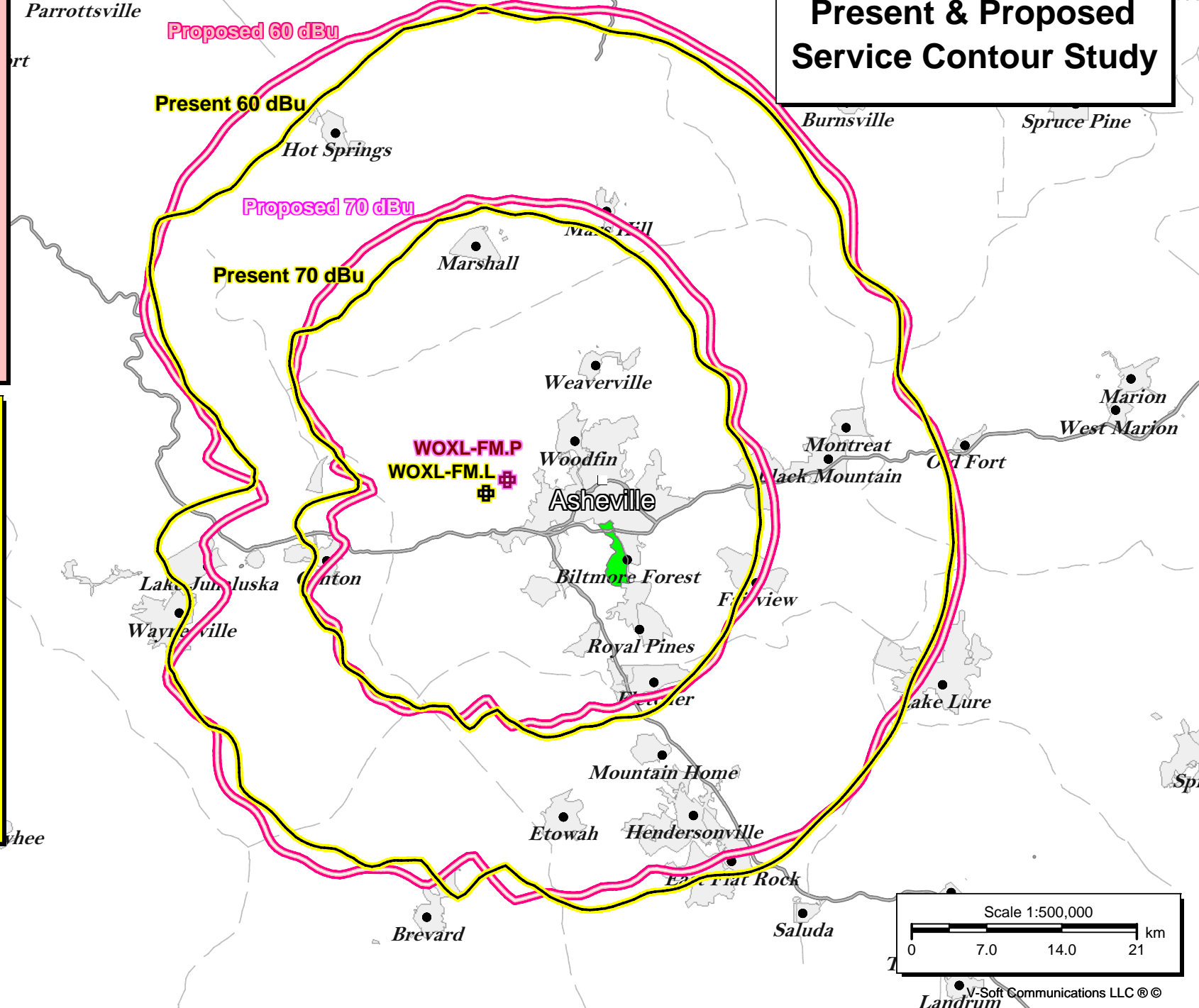
70 dBu Contour  
Total Population: 205,274  
Total Area: 1,695 sq. km

60 dBu Contour  
Total Population: 340,118  
Total Area: 4,910 sq. km

**WOXL-FM.L**  
BLH20020220AAL  
Latitude: 35-35-23 N  
Longitude: 082-40-26 W  
ERP: 1.85 kW  
HAAT: 357.0 m  
Channel: 243  
Frequency: 96.5 MHz  
AMSL Height: 1105.0 m  
Horiz. Pattern: Directional  
Vert. Pattern: No  
Prop Model: None

70 dBu Contour  
Total Population: 207,189  
Total Area: 1,630 sq. km

60 dBu Contour  
Total Population: 350,007  
Total Area: 4,780 sq. km



V-Soft Communications LLC ©

# Exhibit 24.5

## Proposed HAAT Calculation

### (As taken from the FCC.GOV 1 km Globe Terrain Database)



[FCC Home](#) | [Search](#) | [Updates](#) | [E-Filing](#) | [Initiatives](#) | [For Consumers](#) | [Find People](#)

**Audio Division**

(202)-418-2700

**Antenna Height Above Average Terrain (HAAT) / Contour Calculations**

[FCC](#) > [MB](#) > [Audio Division](#) > [HAAT/Contour Calculations](#)

[FCC site map](#)

## Antenna Height Above Average Terrain Calculations -- Input

Latitude 35 36 4.0 North  
Longitude 82 39 7.0 West (NAD 27)

Height of antenna radiation center above mean sea level [RCAMSL] = 1064.0 meters

Number of Evenly Spaced Radials = 8 0° is referenced to True North

## Results:

Calculated HAAT= 339. meters

(Antenna Height Above Average Terrain)  
using 1 km GLOBE terrain data)

## Antenna Radiation Center Heights Above Individual Radials:

0.0°	431.5 meters
45.0°	391.2 meters
90.0°	364.7 meters
135.0°	409.6 meters
180.0°	311.0 meters
225.0°	284.5 meters
270.0°	148.1 meters
315.0°	372.0 meters

New Antenna Height Above Average Terrain (HAAT)  
calculation?

