



# ASATURIAN EATON

and Associates Inc.

**ENGINEERING and LAND SURVEYING**

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1440 Old West Main, P.O. Box 369 Carbondale, IL 62903 / 618-529-3414

3/21/2023

3 ABN Radio  
Attn: Michael Babb  
PO Box 220  
3391 Charley Good Rd.  
West Frankfort, IL 62896

Mr. Babb:

Thank you for allowing us to perform this project. On 3/1/2023 I sent a field crew to the tower located in the Northeast Quarter of the Northeast Quarter of Section 12, Township 8 South, Range 2 East of the Third Principal Meridian, Williamson County, Illinois. At your request we established the correct heights and the proper orientation for the antennas. The heights for each antenna were 197', 208.09', and 185.91' with an orientation to 325 degrees azimuth to True North per the FCC.

To establish the antenna height, we shot the base of the tower, this gave us the elevation of the base. We then established another point to set our total station instrument on. Once set up we shot the center of each antenna, adjusting each antenna with the aid of the climber, to the correct heights.

After each antenna was established at the correct heights we then adjusted them to an orientation to 325 degrees azimuth to True North.

To establish the correct azimuth, we utilized our two previous shots at the tower base and point for our total station. Next we looked at our GPS, which utilizes true north for orientation, we calculated a point at 325 degrees azimuth to True North and set a lath 260' from the tower. This allowed the tower climber to point each antenna to the lath and thus orienting them close to the 325 degrees azimuth to True North. We then shot each antenna, with the total station, adjusting each antenna with the aid of the climber. The climber then slightly adjusted the orientation so that each antenna was at 325 degrees azimuth to True North.

This work, as described above, was completed with the utmost accuracy. The coordinate system used for the survey is the Illinois State Plane Coordinate System, East Zone, NAD 83, and is tied to GEOID 12A. The equipment used to perform field measurements was a Topcon Hiper VR rover, and a Topcon Total Station.

If you have any questions or if we can be of any additional assistance, please do not hesitate to contact me. It has been a pleasure working with you.

Sincerely,

Aaron M. Dauby, PLS  
Asaturian Eaton and Associates, Inc.  
1440 Old West Main Street  
Carbondale, IL 62901  
Phone: (618) 529-3414