

## **Exhibit 34**

Engineering Narrative - Interference  
WHAZ-FM ch 248A FCC file # 6765  
Hoosick Falls, NY  
Capital Media Corporation  
Fire Tower Road Site  
25 July 2014

### **Coordinates and site data submitted**

WHAZ-FM will be the first broadcast license at the proposed site. The entry for coordinates entered in NAD27 values was calculated from the NAD83 values contained in the primary FCC license at this site, KED-923. This licensed facility is part of the radio system of the New York State Police. Other site values, such as tower base elevation, were taken from that license file as well and used as the basis for further calculations contained in this application.

### **Tower**

The existing tower structure intended to be used as the support for the station's directional antenna is not registered in the FCC/FAA Antenna Structure Registration (ASR) database.

A location for the antenna Center of Radiation (COR) was selected near the top of the existing structure at 130 ft Above Ground Level (AGL) precipitating a COR Height Above Average Terrain (HAAT) of 257 meters.

### **Effective Radiated Power (ERP)**

WHAZ-FM is a class A FM station allotted a maximum facility of 6 kW at 100 mts HAAT. Since this COR is over 100 mts HAAT, a corresponding power reduction adjustment must be made to maintain class performance. Peak ERP is specified herein as an adjusted 910 watts.

### **Spacing to Other Stations**

At this location WHAZ-FM makes minimum distance spacing to all affecting stations except for WEXT (fm), a class A FM licensed to Amsterdam, NY on channel 249.

The minimum distance between these two adjacent channel stations as required in 47CFR73.207(b)(1) is 72 kms. The site to site distance between the two stations using the methodology contained in 47CFR73.208 is 66.075 kms or a short spacing of 5.925 kms.

Accommodation of the presence of this short spacing is accomplished by the application of contour protection as annotated in 47CFR73.215. A directional antenna with a sculptured minimal signal null towards WEXT to accomplish the required protection is specified in this application.

WHAZ-FM and WEXT are first adjacent and both stations are class A FM's.

Essentially to calculate the ERP value in this minima, the higher value of the total distances is reviewed by adding the interfering contour of WHAZ-FM ( 54 dBu 50/10 curve) and the protected contour of WEXT ( 60 dBu 50/50 curve) and the converse of these two along the arc angles of signal intimacy.

Higher values rule and the signal of WHAZ-FM has been adjusted accordingly.

A full tabulation of the proposed WHAZ-FM directional pattern follows :

**WHAZFM-P Pattern**  
**HORIZONTAL PLANE PATTERN**  
Pattern RMS 0.912 Field

| Azimuth | Field | dBk   | ERP(kW) | Azimuth | Field | dBk   | ERP(kW) |
|---------|-------|-------|---------|---------|-------|-------|---------|
| 0       | 1.000 | -0.41 | 0.910   | 180     | 1.000 | -0.41 | 0.910   |
| 5       | 1.000 | -0.41 | 0.910   | 185     | 1.000 | -0.41 | 0.910   |
| 10      | 1.000 | -0.41 | 0.910   | 190     | 1.000 | -0.41 | 0.910   |
| 15      | 1.000 | -0.41 | 0.910   | 195     | 1.000 | -0.41 | 0.910   |
| 20      | 1.000 | -0.41 | 0.910   | 200     | 1.000 | -0.41 | 0.910   |
| 25      | 1.000 | -0.41 | 0.910   | 205     | 1.000 | -0.41 | 0.910   |
| 30      | 1.000 | -0.41 | 0.910   | 210     | 1.000 | -0.41 | 0.910   |
| 35      | 1.000 | -0.41 | 0.910   | 215     | 1.000 | -0.41 | 0.910   |
| 40      | 1.000 | -0.41 | 0.910   | 220     | 1.000 | -0.41 | 0.910   |
| 45      | 1.000 | -0.41 | 0.910   | 225     | 1.000 | -0.41 | 0.910   |
| 50      | 1.000 | -0.41 | 0.910   | 230     | 1.000 | -0.41 | 0.910   |
| 55      | 1.000 | -0.41 | 0.910   | 235     | 1.000 | -0.41 | 0.910   |
| 60      | 1.000 | -0.41 | 0.910   | 240     | 1.000 | -0.41 | 0.910   |
| 65      | 1.000 | -0.41 | 0.910   | 245     | 0.873 | -1.59 | 0.693   |
| 70      | 1.000 | -0.41 | 0.910   | 250     | 0.796 | -2.39 | 0.577   |
| 75      | 1.000 | -0.41 | 0.910   | 255     | 0.720 | -3.26 | 0.472   |
| 80      | 1.000 | -0.41 | 0.910   | 260     | 0.647 | -4.19 | 0.381   |
| 85      | 1.000 | -0.41 | 0.910   | 265     | 0.581 | -5.12 | 0.307   |
| 90      | 1.000 | -0.41 | 0.910   | 270     | 0.522 | -6.05 | 0.248   |
| 95      | 1.000 | -0.41 | 0.910   | 275     | 0.469 | -6.98 | 0.200   |
| 100     | 1.000 | -0.41 | 0.910   | 280     | 0.437 | -7.60 | 0.174   |
| 105     | 1.000 | -0.41 | 0.910   | 285     | 0.421 | -7.91 | 0.162   |
| 110     | 1.000 | -0.41 | 0.910   | 290     | 0.406 | -8.24 | 0.150   |
| 115     | 1.000 | -0.41 | 0.910   | 295     | 0.396 | -8.45 | 0.143   |
| 120     | 1.000 | -0.41 | 0.910   | 300     | 0.411 | -8.12 | 0.154   |
| 125     | 1.000 | -0.41 | 0.910   | 305     | 0.458 | -7.19 | 0.191   |
| 130     | 1.000 | -0.41 | 0.910   | 310     | 0.510 | -6.26 | 0.236   |
| 135     | 1.000 | -0.41 | 0.910   | 315     | 0.567 | -5.33 | 0.293   |
| 140     | 1.000 | -0.41 | 0.910   | 320     | 0.631 | -4.40 | 0.363   |
| 145     | 1.000 | -0.41 | 0.910   | 325     | 0.703 | -3.47 | 0.449   |
| 150     | 1.000 | -0.41 | 0.910   | 330     | 0.782 | -2.54 | 0.557   |
| 155     | 1.000 | -0.41 | 0.910   | 335     | 0.871 | -1.61 | 0.690   |
| 160     | 1.000 | -0.41 | 0.910   | 340     | 0.935 | -0.99 | 0.796   |
| 165     | 1.000 | -0.41 | 0.910   | 345     | 1.000 | -0.41 | 0.910   |
| 170     | 1.000 | -0.41 | 0.910   | 350     | 1.000 | -0.41 | 0.910   |
| 175     | 1.000 | -0.41 | 0.910   | 355     | 1.000 | -0.41 | 0.910   |

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